A SYSTEM

OF

GEOGRAPHY,

POPULAR AND SCIENTIFIC,

OR

A PHYSICAL, POLITICAL, AND STATISTICAL ACCOUNT

OF THE

WORLD AND ITS VARIOUS DIVISIONS.

BY JAMES BELL,

AUTHOR OF CRITICAL RESEARCHES IN GEOGRAPHY, EDITOR OF ROLLIN'S ANCIENT HISTORY,
&c. &c.

ILLUSTRATED BY A COMPLETE SERIES OF MAPS, AND
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CHINESE EMPIRE.

THE CHINESE EMPIRE is, with the exception of Russia, the largest in the world, embracing an area of 5,426,000 British square miles, according to Balbi's political and statistical Table published in 1828. It extends from 73° to 142° east longitude,[1] and from 21° to 55° north latitude. Reckoning from Rashgar to the mouth of the Amoor, its length is about 3,460 miles, and its greatest breadth from the Saianian mountains to the southernmost point of China opposite to the island of Hay-nan more than 2,000 miles. The Eastern ocean, forming many gulfs and straits, washes its shores for an extent of 3,600 miles. The gulf of Tonquin and the Chinese sea bound the empire on the south. The channel of Fermosa separates the island of that name from the continent. The Blue sea extends between China and the islands of Lieuchoo, and Japan; the Yellow sea between China and Corea. The whole of the Chinese empire may be included under the following heads: China Proper, Peninsula of Korea, Isles of Hainan, Fermosa, and the Lootchoo Archipelago; Mandshooria, including Lyautong; Mongolia, Soongaria, Little Bukharia, Eastern and Western Thibet, and the Tartars of Kokonor. All the latter divisions, beginning with Mongolia, comprehend what is now denominated Central Asia.

CHINA PROPER.

Name.] Chung-kwe, or the Central Kingdom, is the name by which the Chinese themselves denominate their country, and they so call it from a belief that it is situated in the centre of the earth, and that all other kingdoms are mere isolated extremities of the world. Khatai, the Tartar appellation, taught our forefathers to call China, Cathay; while Chin, the name given it by its southern neighbours, is the origin of Sin and Sina, Chin and Machin, the names used by the Arabs, Persians, Indians, and Europeans in the middle ages. The *Sinae* were probably the southern, as the *Seres*, better known to the ancients, were the northern Chinese. The whole of the empire is now generally called by the Tartars, the present possessors, Ta-ts'hing-kwe, the country of the Ta-tshing (i. e. the reigning dynasty.)

Boundaries and Extent.] China Proper does not embrace one-fourth of the Chinese empire. It comprehends a surface of 1,298,000 square miles, extending from lat. 20° to lat. 41° N., and from long. 97° 42′ to 122° 53′ E. It is bounded on the N. by Chinese Tartary; on the S. by the gulf

[1] Owing to the want of astronomical observations, it is impossible to fix with precision the western frontier of the Chinese empire; but it cannot be less than 73° E. long. from Greenwich. The most eastern point, however, of the Chinese empire is well known, as the mouth of the Amoor has been determined both in longitude and latitude by La Perouse, Broughton, and Krusienstien.

of Ton-king and the Birman empire; on the E. by the Yellow Sea and the Chinese Sea, and on the W. by Thibet. It occupies a larger space than Hindoostaun, and its figure is much more compact, approaching to an oval form. The greatest length is from the most S.W. point of Yunnan to the most eastern point of the peninsula of Shantong; that is, from 97° 42′ to 122° 53′ E. long.; whilst its greatest breadth from S. to N. is from 20° 15′ to 41° N. lat., or 20° 45′. But if the Island of Hainan be included, 2 degrees must be added, making 23 in whole. The superficies of 1,298,000 square miles only includes the provinces within the great wall. Lyautong, or Quantong, being excluded, though in all former statements it was included in Proper China, as may be seen in Du Halde. Hence some have made the area of China Proper, including this province, 1,500,000 square miles. To this must be added the islands of Hainan and Fermosa.

Divisions.] The following table, published by authority in the reign of Kien-Long, who died in 1799, exhibits the provinces into which China is divided, with their chief cities, population, &c. A more particular description of these will be found in succeeding chapters. The 5th column expresses, in geographical miles, the distance from Peking of each capital of the 15 provinces. The distance expressed is not horizontal as measured on a map, but by road stages, originally given in Chinese lis or furlongs of 250 to a degree, and these reduced to geographical miles. The province at the foot of the table, called Fong-t'hyen-fu, or Chinese-Tartary, is the ancient province Lyautong, without the great wall, and must not be confounded with Mandshooria or Eastern Chinese Tartary.

Provinces.	*Chief Cities.*	*Lat. N.*	*Long. E.*	*Geographical Miles.*	*Population, A.D. 1790.*
I. King-se, Chi-li, or Pe-che-li,	Shun-t'hyen-fu, or Peking,	39° 55′	116° 27′ 45″		3,504,038
II. Kyang-nan,					
1. Kyang-su, or Nan-king,	Kyang-Ning,	30 50	120 27 45	576	28,967,235
2. Ngan-hwai,	Ngan-king,	31	119 27 45	648	1,438,123
III. Shan-si,	Tai-ywen,	38	110 37 45	244.8	1,860,316
IV. Shantong,	Tsi-nan,	36 45	117 42 45	192	25,447,633
V. Ho-nan,	Kai-fong Tong-king Si-king, Pyen-king,	35	113 37 45	369.6	2,662,969
VI. Shen-si,					
1. Shen-si,	Si-ngan,	35	108 7 45	636	257,704
2. Kan-su,	Lan-cheu,	36 20	103 47 43	969.6	340,086
VII. Che-kyang,	Hung-cheu,	30	110 57 45	792	18,975,099
VIII. Kyang-si,	Nan-chang.	28 40	114 37 45	1164	5,922,160
IX. Hu-kwang,					
1. Hu-pi,	Vu-chang,	30	115 49 45	757.2	24,604,369
2. Hu nan,	Chang-sha,	28 20	112 37 45	1092	9,098,010
X. Se-chwen,	Ching-tu,	29 40	103 37 45	1370 4	7,789,782
XI. Fo-kyen,	Fo-cheu,	26 3	117 57 45	1471.2	1,684,528
XII. Kwang-tong,	Kwang-cheu,	23 10	112 27 45	1816.8	1,491,271
XIII. Kwang-si,	Kwei-lin,	25 20	110 37 45	1790.4	2,569,518
XIV. Yun-nan,	Yun-nan,	22 20	99 57 45	1968	3,083,459
XV. Kwei-cheu,	Kwei-yang,	24 40	106 37 45	1833.6	2,941,391
					142,638,091
Fong-t'hyen-fu, or Chinese Tartary,	Hing-king,	41 40	124 57 45	410.4	390,714
	Shing-king,	42	123 27 45	352.8	
					143,028,805



CHAP. I.—HISTORY.

It is not unusual for the enemies of the Bible to point out the Chinese as a people whose records are more ancient than Noah's flood, and even than the common term assigned as the epoch of the Mosaic creation. But although the Chinese possess an unbroken series of annals for a very long period, no dependence can be placed upon it, either on the ground of physical or moral circumstances. Their books are written on very brittle paper, and have been frequently re-copied. It is a well-established fact, also, that about two centuries before the Christian era, a barbarous monarch caused all their writings then in existence to be destroyed. In addition, their national vanity leads them to gloss over every fact which militates against their pretensions, and their habitual falsehood stifles every scruple as to a deviation from the truth. Every nation has its fabulous history, and is inclined to assume a high antiquity. Scotland, among the rest, has exhibited a long gallery of fictitious monarchs; and why should any more reliance be placed on the early annals of China than on those of other countries? Are Pe-kis and Ki-pis, Kang-nangs and Nang-kangs, Tong-wongs and Wong-tongs, more worthy of credit than Boeces and Buchanans?

It would be idle and insipid to trace out the annals of China with minuteness; for, besides that little dependence can be placed upon them, they contain little to rouse the sympathy of the reader, and are wholly unconnected with European interests. The most interesting particulars of the Chinese history relate to the incursions of the Tartars, who at last conquered the whole empire, and who still continue to hold the sovereignty; though, by transferring the seat of empire to Pe-king, and adopting the language and manners of the Chinese, Tartary would seem rather to have been conquered by China, than China by Tartary. In the earlier ages of its existence, the empire of China must have been composed of various tribes, who changed their place of residence as circumstances required. This is sufficiently established by such events as the following, recorded in Chinese histories, namely, that in the year 1401 before Christ (1500 years after the pretended commencement of the monarchies), the emperor Poen-keng emigrated, with all his subjects, to a new settlement, and assigned the example of his ancestors in vindication of the measure; that in 1122, the empire was conquered by Voo-vang, at the head of the Tcheoo, a people whom one of their succeeding sovereigns affirmed to be far from numerous; that the different tributary kingdoms, subdued by the founder of that dynasty, soon ceased to acknowledge the authority of his successors, and that at length the most powerful of them, the Tsin, introduced a new race of sovereigns, 255 years before Christ; that the fourth emperor of this new dynasty, Shie-hoang-tee, was the first who effectually reduced these independent princes, and thus became sole master of the empire; but found such a variety of usages among these constituent parts of his dominions, that he could devise no better expedient for removing all traces of their disunion, and compelling them to live under the same laws, than to cause all their historical records to be destroyed, in the year 213 before Christ.

The Chinese empire, now united for the first time, did not long continue under one head, but was soon dismembered into distinct sovereignties, till it was again established by Kao-tee, the founder of the Han dynasty, 200 years before Christ. About 220 years after the Christian era, it was again divided into three kingdoms; that of the Han, in the provinces of Se-tchuen and Shensee; that of the Oey, in the northern part of China; and that of

the Oo, in the southern regions. These three kingdoms and the reigning families were again annihilated by Voo-tee, who founded the dynasty of the western Tsin, A.D. 265; while Yuen-ty, in like manner, established that of the eastern Tsin, A.D. 317; but neither of these princes were long in possession of all China, and several provinces revolted during their respective reigns. After the destruction of their dynasty, A.D. 420, the whole country was thrown into a state of confusion, which gave rise to two empires, the northern and the southern. The empire of the north was almost constantly occupied by the Oey or Tartars named Topa, of whom the Yuen Oey (or first Oey) reigned in Shan-see and Honan from A.D. 386 to 534; the Tong-Oey (or eastern Oey) reigned in Honan from A D. 534 to 550, when they were displaced by the family of Pe-tsee, who held the throne till A.D. 578; and the See Oey (or western Oey) reigned in Shen-see from A.D. 535 to 556, when they were displaced by the Heoo-tcheoo (or later Tcheoo), who prevailed till A.D. 581. The empire of the south was held from A.D. 420 to A.D. 479, by the dynasty of Song, which was followed in 479 by that of Tsee; in 503 by that of Leang; and in 557 by that of Tchin. In 581, the two empires were united by Ven-tee, founder of the Soo-ee dynasty, which was displaced in 618 by that of Tang; during the latter end of whose government, the empire was agitated by new troubles, desolated by the Tartars, named Kee-tan, and divided into so many independent sovereignties, that it was reduced within a very narrow compass, under the Heoo-oo-tay (or five later dynasties): the Heoo-lang in 907, the Heoo-tang in 923, the Heoo-tsin in 936, the Heoo-han in 947, and the Heoo-tcheoo in 951. These commotions and divisions were once more terminated in 960 by Taytsoo, founder of the dynasty of Song; but the two Tartar nations of Kee-tan and Kin, or Niu-tche, and the prince of Hya still retained possession of the northern parts of China. In 1127, the Kin having destroyed the Kee-tan, the Song were obliged to remove the seat of their empire to a greater distance from these formidable neighbours, and resided in the province of Tche-kiang, till they called in the Yuen or Moguls, called by the Chinese Mong-koo, to assist them against the Kin in 1235, and were themselves overthrown by those allies in 1260, when Kublai-Khan, a descendant of the renowned Gengis-khan, became absolute sovereign of all China. Since the establishment of the Mogul dynasty, the empire has never been again divided; but has experienced two great revolutions, at the accession of the Chinese dynasty of Ming in 1368, and of the Mantchoo Tartars in 1644; and has scarcely, in any reign, been entirely free from revolts, wars, and domestic seditions. The empire of China, in short, instead of having existed as a great and united nation 3000 years before Christ, was never formed into one state till the year before Christ 220; but, being soon again dismembered, and only transiently united under successive sovereigns, has composed one sole and undivided monarchy only since the year of Christ 1279. Instead, therefore, of being regarded as a privileged country, governed from time immemorial by the same constitution, exempt from foreign conquest and intestine commotions; the only peculiarity which it possesses, in comparison with the other empires which have disappeared from the earth, is this, that, owing perhaps to its peninsular situation, at the extremity of the habitable world, and its consequent exemption from the sweep of those conquering nations, who changed the people whom they overthrew, it has preserved its manners and usages in a great measure unaltered, amidst the various revolutions and subjugations which it has experienced.

Five emperors of the Tartar race in succession, and all of them men of good understanding and vigorous minds, have now continued, without interruption, to rule over the Chinese empire; and have thus, it may be supposed, completely established their family in the supreme power. Recent occurrences, however, begin to indicate a more unsettled state of things in that country, and at least to show, that the administration of so vast an empire is becoming daily a more difficult task. The Tartars, increasing in security, have become less attentive to conciliate the Chinese; and all the high offices are filled with the countrymen of the sovereign.* It is suspected, that the government entertain a design of introducing the Mantchoo language into general use, instead of the Chinese, as great attention has been paid to its improvement, and as all the children, one of whose parents is of Tartar descent, have been expressly required to be instructed during their infancy, and to pass their public examinations in the Mantchoo tongue.

CHAP. II.—PHYSICAL FEATURES—CLIMATE—PRODUCTIONS.

Mountains.] The general aspect of China is that of a level, fertile, and highly cultivated country. Its surface is, however, varied by mountain chains of considerable magnitude, though they seem to be only lower stages of those enormous masses which stretch across central Asia, One chain, seemingly a prolongation of the Himalaya ridge, runs through the southern provinces, from west to east, and terminates on the sea coast, a little to the south of the great river the Yang-tse-kiang. Part of this ridge, lying between Pekin and Canton, has been crossed by Europeans. Being covered with verdure and trees to the very summit, which is in many places crowned with pagodas, it presents a variety of picturesque aspects. The mountains in the north of China appear also to be very considerable, particularly those that separate the province of Shen-si from that of Se-chwen A lofty chain, consisting chiefly of naked rocks, runs along the whole northern frontier, separating China from Tartary. A branch of this chain turns aside the stream of the Hoan-ho five or six hundred miles, though by a circuitous tract it again reaches its original line of course. The province of Shan-tong consists for the most part of a group of mountains wholly detached from any other range, and running out towards the N.E into a large peninsula. These mountains contain coal mines.

Rivers.] China is distinguished for the magnitude of her rivers, and is doubtless indebted to them in a great measure for her early advances in culture and civilization. The Hoan-ho, or Yellow river, and the Yang-tse-kiang, or Blue river, two mighty parallel streams, water the whole extent of its central regions. These rivers rise from almost unknown sources in the heart of Thibet, and from the summit probably of that loftiest portion of the globe, The Hoan-ho, after entering China, is, as already noticed, turned to the north, and carried even beyond the limits of the empire, but it soon recrosses them, and this winding course serves only to diffuse more widely the benefits of its waters. After spreading fertility through some of the finest provinces of China, it falls into the ocean at a very small distance from its brother stream, from which it had once been separated by an interval of more than a thousand miles. The course of the Hoan-ho is estimated, though with some uncertainty, at about 1800 miles; that of the Yang-tse-kiang at 2200. This last has by the grandeur of its stream struck all travellers with admiration. Marco Polo consider-

ed it, America being then unknown, as decidedly the greatest river in the world; and Mr Ellis conceives, that only those of the New World can dispute its native title of the "firstborn of Ocean." Its breadth, above Nankin, is from three to four miles, its banks populous, diversified by wooded mountains, and highly picturesque. These primary streams have numerous tributaries. several of which equal the greatest rivers of Europe. The *Yunho*, the *Hoeiho*, and the *Hoay-ho* fall into the Yellow river. The *Yalon-kiang* (itself 700 miles in length) the *Tchoo*, the *Ta-kiang* and the *Yuen-kiang* are tributary to the Blue River. But besides these, China has two independent rivers of great magnitude, the Peiho in the north, which, after rising in Tartary, passes Pekin, and falls into the Yellow Sea; and the Kankiang in the south, which, after a course of nearly 700 miles, falls into the sea of China, near Canton, thus giving origin to the immense trade of that city.

Lakes.] Of the Lakes of China the Poyang is the best known, having been sailed through by a late embassy. It is about 30 or 40 miles in circumference, and the scenery is most striking, being surrounded by lofty granite mountains, down which vast torrents are continually pouring. On its banks are several large cities, and the tops of the hills are adorned with numerous pagodas. The Tung-ting lake, according to Mr Ellis' information, is much longer, being nearly 300 miles across. It is situated in the province of Hou-quang, which signifies the Country of Lakes, and fully answers to the title, though all the others are much smaller than the Tungting. No remarkable lakes appear to occur in any other part of the empire.

Canals.] If China is happily situated with regard to rivers, she has been no less happy in, every where, improving and connecting her navigation by canals, which she has done to an extent that surpasses all other nations. No nation can produce a parallel to the Yun-ho or Great Canal, which extends in a continuous line from Pekin to the Yang-tse-kiang, a distance of 500 miles, and by means of which an inland navigation is maintained, with the interruption of a single day's journey, between Pekin and Canton, a distance of not less than 1200 miles. This great work is said to have been executed under the reign, and by the directions of Khublai Khan, a grandson of the renowned Genghis Khan. The Chinese canals are not constructed on the same artificial and scientific principles as those of Europe, nor composed, like them, of standing water, fed by reservoirs, elevated and lowered by locks. They are formed merely by turning aside the course of a river, and conducting its waters, by an artificial channel, till they join those of another river, from which it is again continued, according as it is found necessary or practicable. They have, for the want of locks, generally, a more circuitous course than European canals, and their waters, instead of being, like them, at rest, have a perceptible current. The Wenho, a river in the province of Shan-tung, is the main feeder of the Great Canal, from which it descends on one side to the north, falling into the Peiho, near Pekin; and thence, on the other side, to the south, till it joins the Hoang-ho or Yellow river; thence to the Yang-tse-kiang, which great stream, with its tributary, the Kan-kiang, carries on the navigation to the frontier of the province of Canton. It is here interrupted by a chain of mountains, to cross which occupies a day's journey, when the traveller embarks upon another river, the Pe-keaung, which carries him to Canton. Smaller canals, connecting the rivers and larger canals with each other, are innumerable; and there occur many bridges, remarka-

ble for their magnitude, and the difficulties to be overcome in their construction.

Climate.] A country extending from north to south so far as China, must necessarily experience great variety of climate. The southern provinces, from their proximity to the equator, experience heats stronger than those of Bengal, but moderated by periodical winds; and the northern provinces, owing partly to their distance from the equator, and partly to the neighbourhood of the lofty mountains of Tartary, are extremely cold. The mean heat of Canton is about 76° of Fahrenheit's scale. At Pekin, the mean term of the greatest heat is 121°; that of the greatest cold 63° below zero; the medium heat of the year 55°. The winds are often extremely violent, especially at Pekin. June, July, and August, are the rainy months: it seldom rains in winter. No part of China is said to be unhealthy, a circumstance which may be owing, in some measure, to the state of cultivation in which the country has long existed.

Vegetable Productions.] In China are produced all the fruits common to the tropical and temperate zones; but some of them do not succeed well. The apples, grapes, and pomegranates, are very indifferent; olives, though abundant, are gathered for eating, but not for making oil; a wild apricot, however, which flourishes in bleak tracts and a barren soil, is much used for that purpose. The oil is expressed from the kernels, and the stones are consumed as fuel. There are lemons no bigger than walnuts, and large oranges with a large solid pulp. China has some fruits and vegetables peculiar to itself; such as the *li-chi* (dimocarpus litchi), the *long-yan*, dragon's eye (dimocarpus longan) *hwang pi* (cookia punctata), &c. Of grain, rice is the staple produce; then barley, and after that wheat, especially in the north; buck-wheat, millet, maize, pease, beans, and other vetches, are the other kinds of grain and pulse most cultivated. Sugar-cane, cotton, hemp, lintseed, tobacco, indigo, mulberries, varnish trees, (*Rhus vernix*,) camphor, tallow-trees (Stillingia Sebifera), and cinnamon, are among the trees and shrubs most common in the fields and gardens. But the most remarkable among the vegetable productions of China is the tea plant.

Tea Plant.] This plant, though it affords us a daily beverage, is but imperfectly known to Europeans. In their descriptions of it naturalists differ. It is not exactly known, whether the different kinds of tea sold in Europe, under various names, be produced by the same shrub, or by shrubs of different kinds. Leaving these uncertainties, it appears to be generally agreed, that the tea plant is found in China, Japan, and Tonquin; and it is not certain that it grows spontaneously in any other part. It is said to grow to the height of five or six feet, some say, to the height of ten or twelve. The leaves are about an inch and a half in length, tapering to a point, and indented upon the edges. They have a strong resemblance to those of the sweet-brier, and are of a dark green colour. The flowers resemble a wild white rose. The branches are numerous and irregular. The wood is hard, and of a whitish green colour. The fruit, which is small, contains several round blackish seeds; but the only valuable part of the plant is the leaves. The tea-tree grows in many parts of China; but it is said to be found in greatest perfection between 30° and 45° N. lat. It grows wild, but is much improved by careful culture. The soil upon which it is planted is said greatly to affect the quality of the tea. That which is produced upon a clay soil is of the worst quality; that which grows in a light soil is better; and the best is reared in rocky situations.

It is propagated by seeds. When the shrub has attained the age of three years, the leaves are fit for being pulled. When it has attained a certain height it is cut down, and numerous sprouts rise from the same root. Kempfer affirms, that tea is collected at three different seasons: first at the end of February, or beginning of March. The leaves at this time are small and tender. The tea thus procured, is called "tea in powder," and is used by the upper classes. The second crop is gathered about the end of March, or beginning of April. The leaves are then of different sizes; and after they are pulled, they are assorted into different parcels; the smallest forming tea of the finest quality. The last crop is gathered in the end of May, or beginning of June. The leaves have then attained their full growth, and are numerous. The tea gathered at this time is coarse, and is used by the common people. When the leaves have been collected and assorted, according to their different sizes and qualities, they next undergo such operations as are necessary to prepare them for preservation and for use. They are exposed to the steam of boiling water. They are laid upon plates of copper, and are dried over the fire, till they assume the appearance in which we always see them.

For gathering the leaves of the tea-shrubs growing wild among the mountains, in situations where the most active men could not get at them, the Chinese have laid brutes under contribution. It is said that they train monkeys to climb up difficult places, and to strip all the leaves from the shrubs that are pointed out to them. These leaves are picked up by persons attending for the purpose, who reward their four-footed assistants from time to time with fruit. It may easily be conceived how difficult it is to train so indocile a creature as the monkey to this kind of operation—but what is there that Chinese patience and ingenuity have not accomplished? They have availed themselves even of the voracity of the cormorant, which they have taught to dive in quest of fish to the bottom of the lakes and rivers, and to bring his prize, as a tribute to his master. The Chinese and Japanese keep their tea a year before they use it for drink, because they assert that it is neither so good nor so wholesome when quite new. Father Benoit, a French missionary at Pekin, wrote as follows in 1772 to M. Delatour: "Tea in general acquires by the voyage to Europe a much more agreeable flavour, and becomes much more salubrious; so that a chest of the most common sort, carried to France, and brought back to Canton, is rendered by this double voyage a highly esteemed present in the country by which it was produced." The Chinese pour hot water upon tea, not in a tea-pot as we do, but in the cup out of which they drink it, just as it is, without either sugar or cream. The missionaries, in their house at Pekin, have no other beverage. The Japanese reduce their tea to a fine powder, which they use in the following manner:—The equipage for the tea-table, and the box containing this powder, are set out before the company; the cups are filled with hot water, and so much of the powder as can be taken upon the point of a knife is thrown into each cup, and stirred with an instrument like a tooth-pick, till the liquor begins to froth. It is then handed round to the company, who sip it while hot. This method is not peculiar to the Japanese, but is common in some provinces of China also. Such of the Chinese as pretend to be nice judges of tea, pay the most minute attention to the making of this beverage. The water must not be boiled upon a fire of any kind of wood, but only one of pine-wood, in an earthen vessel from a particular province, and it must be infused in another particular sort of vessel. The essences of roses, jessa-

mine, and moli-hoa, and all the perfumes of the flowers, are employed to heighten the delicacy of this favourite drink. The manner of performing the honours of the tea-table with grace, gentility, and politeness, is in China and Japan an art which has its principles, its rules, and its masters, who follow the profession of giving instruction in it. This art forms part of the education of youth of both sexes, who are taught to make tea and wait on company, as in Europe we take lessons in dancing, fencing, or riding. When tea has lost its virtues by age, and is no longer fit for drinking, the Chinese employ it in dying silks a brown or chesnut colour. A great quantity of old tea destined for this purpose is sent annually from China to Surat.

Animals.] China has scarcely any animals which are not common to other countries. The domestic animals are reared in comparatively small numbers. Elephants are common in the south of China; and the unicorn rhinoceros frequents the marshes in Yun-nan and Kwang-see. The lion is said to be unknown in China, but what is there described as the tiger is supposed to be the maneless lion. Our ignorance, however, of the interior of China prevents us from saying any thing with certainty on this subject. Monkeys are common in some parts. The musk-deer is among the most valuable of the Chinese quadrupeds; the buffaloes are usually grey instead of black; and the pigs there are much more cleanly than those with us. Small birds of beautiful plumage, and water-fowls, abound. Much value is set on the Mandarin duck. Beside the fish common in Europe, the Chinese have many unknown to us; as the *sho-kya-yu*, or 'fish in armour,' (*tetrodon*,) which tastes like veal, and is covered with spines; a kind of cod, caught and salted on the shores of Fo-kyen; hai-seng, an unpalatable kind of blubber, (*medusa*,) eaten by the common people; and kin-yu, or 'gold fish,' is a native of a Chinese lake, and, as with us, a constant ornament of the ponds of their pleasure-grounds. It was brought to England in 1611. The splendid butterflies, and multitudes of singular insects peculiar to China, are well known as favourite subjects of the Chinese artists. Silk-worms are common, and seem to be indigenous in the country.

Minerals.] There are some silver mines in China, but they are little worked. Gold is obtained from the sand of some of the rivers. A white metallic substance, called tutenague, is common in China; but it is not exactly known whether it be a simple or compound material. There is also a peculiar copper of a white colour, which the Chinese call *petung*, or, according to some, *pu-kfong*. Yellow copper is used in the current coins of the empire. Quicksilver mines are common, but lead and tin are scarce. Realgar, or native sulphuret of arsenic, is employed by the Chinese in blocks for making pagodas and vases. Lazulite, jasper, rock-crystal, nephritic jade, magnetic iron, granite, porphyry, and different kinds of marbles, are found in China. Coal is not uncommon, and collieries are numerous, particularly in the neighbourhood of Canton. The torrents descending from the mountains of Yun-nan, Kwei-chew, and Shen-si, wash a kind of marble, which yields an agreeable sound, and which is called 'the musical stone.' It is used in musical instruments. *Petuntse*, a whitish luminated feltspar; *kaolin*, a feltspar in the state of earth or clay; and *che-kao*, or sulphate of barytes, are the substances employed in the composition of Chinese porcelain.

CHAP. III.—AGRICULTURE—MANUFACTURES AND COMMERCE—MONEY, WEIGHTS, AND MEASURES.

Agriculture.] Of all the arts, agriculture is the most practised in China. Next to learning, it is the most honoured, and is considered as the basis of national prosperity. Every spring, a public ceremony is performed in its honour by the emperor, who lays aside his imperial robes, and opens several furrows with the plough, in a field appointed for the purpose, which ceremony is performed on the same day by the vice roys of all the provinces. The extraordinary diligence of the peasantry in cultivating the ground is not equalled by any people in the world. In the preparation of manure, no substance susceptible of putrefaction escapes them; and innumerable old men and women, as well as children, are constantly employed about the streets, public roads, banks of rivers and canals, &c. in picking up offal of any kind that may forward the process of vegetation. To such an extent is this carried, that manure, formed into cakes, is made an article of commerce, and sold to farmers, who, however, do not use it in a compact state.

The deficiency of cattle, which makes all these arts of procuring manure necessary, still leaves the supply too scanty. It is seldom applied to the rearing of grain, but is reserved for the purpose of procuring speedy and successive supplies of culinary vegetables. The seeds are steeped in liquid manure before they are sown, and liquid manure is from time to time applied to the roots of the plants; arts which we have frequently seen practised in the wilds of Scotland, where the redundancy of population was neither felt nor feared.

Grain is the principal object of Chinese cultivation. In the southern provinces, rice is chiefly raised, while wheat supplies its place in the north; but the species of vegetables, which are cultivated for food, are almost innumerable. A kind of brassica, bearing a strong resemblance to the coss lettuce, is cultivated in great quantities, and much relished as food. It thrives best in the northern provinces, where it is salted for winter provisions, and carried in that state towards the south. In some places, Indian corn and millet are reared. Tobacco is also an object of culture; but instead of being cured in houses, as in America, it is always cured in the open air. The annual cotton plant is reared in considerable quantities, though not sufficient for the use of the inhabitants, since cotton cloth is universally worn by both sexes. A great quantity, therefore, is imported from Bombay.

The mode of cultivation is, in some instances, nearly the same as in Europe; in others it is very different. The instruments for thrashing and winnowing are said to be upon the same principle with our own, and to be constructed in almost a similar manner. As animals are few, enclosures are not necessary; and as they are supposed to occupy too much ground, they are in general avoided. The animals used in tillage, which are chiefly oxen in the north, and buffaloes in the south, are fed in stalls, upon chopt straw and beans. The plough is a very simple machine. It has no coulter, for the ground being seldom in grass, there is no turf to penetrate. The share, which is sometimes made of iron, but more frequently of that species of timber, from its hardness, called ironwood, terminates in a curve so as to turn back the earth. To draw it, more than a single ox or buffalo is seldom necessary; and that office is sometimes performed by men or women.

The Chinese are too sparing of their grain to sow it in the broadcast way; besides, they are convinced that, by drilling, they procure much more luxuriant crops. Every kind of grain, therefore, is either sown in drills, or dibbled. The drills run generally north and south, as that is supposed to be the best direction. The fields are not laid out in ridges, but every where present a level surface.

Irrigation, or the watering of ground, which in Europe is confined chiefly to meadows, is in China applied with care in all their processes of cultivation. When the water descends from a lofty situation, it receives the requisite direction by proper channels prepared for it. When the land to be irrigated is higher than the reservoir, the difficulty is greater. For raising the water various contrivances have been adopted. Sometimes it is raised by buckets, swung on cords between two men, or attached to a lever. Sometimes it is raised by a species of chain pump, of a very peculiar construction.

The emperor is regarded as the sole proprietor of the soil; and the holder of a landed estate pays as rent to the sovereign one-tenth of what his ground is supposed capable of producing. Though he be thus in reality, therefore, a tenant at will, yet he is never deprived of his possession, as long as he continues to pay his rent, or rather land-tax, to the crown; and the Chinese cultivators regard their farms in no other light than personal property, as long as they find means to pay the public assessments. These holders of lands from the crown resemble European proprietors in this respect also, that they can let what portion of their grounds they please, to others, for a rent which is generally equal to half the produce; and it is on these terms that the great body of the Chinese peasantry cultivate their little farms. There is thus a pretty equal division of the lands among the growers of grain; and there are no immense farmers or monopolizers of produce, who can command the market. There is no ground set apart for the pleasure of individuals, but all is open to cultivation, and a free sale permitted to every dealer. There are no restrictions either from fishing upon the rivers, coasts, and lakes, or from killing game upon their own lands and the public commons. Yet, with all these encouragements to the agriculturists, and notwithstanding all the honour attached to their occupation, they are not able to supply the wants of the nation; and seldom do three years elapse in succession, without a famine in one or other of the provinces. This frequent recurrence of scarcity may no doubt be partly ascribed to the circumstance of China being surrounded by mountainous and barren countries, from which it can draw no provisions in an unfruitful season, but which it is rather obliged occasionally to supply; to the want of foreign commerce, which prevents the importation of grain in the event of deficiencies; to the destruction frequently occasioned to the crops by droughts or inundations; to the great quantity of grain, especially of rice, which, in spite of the existing laws, is daily employed in the distillation of rack, and other spirituous liquors. But the principal cause of these scarcities is to be sought in the immense tracts of land which are suffered to lie waste, and in the want of enterprise and skill in the Chinese cultivators. It is generally imagined that every spot of ground in the empire is in a state of regular tillage; and then it is made a matter to be accounted for, how famines should be so very frequent. We read in many of the accounts of China, of the wonderful fertility of its soil; of the care of the husbandman to root out every hedge or tree, so that not a foot of

ground may be lost; of the very mountain-sides being cut in terraces, like those of the *Pays de Vaud*, between Lausanne and Vevay, and covered with produce. All this indeed is strictly the fact in the immediate neighbourhood of towns and villages; but, partly from the dread of plunderers, and partly from the want of cattle to transport the manure and the produce, the more distant lands are almost entirely useless and unproductive; and it is calculated, that one-fourth of the whole country consists of lakes and swamps, which are totally uncultivated. On each side of the river Pei-ho, at no great distance from the capital, the gentlemen of the British embassy perceived no appearance of great cultivation. The greater part of the land was sour swampy ground, covered with coarse grass, rushes, and reeds; and few trees were to be seen, except in the vicinity of the villages. No habitation appeared, that could be considered as the residence of a gentleman, or even as a comfortable farm-house; but every thing, on the contrary, seemed to indicate the greatest poverty and meanness of condition in the inhabitants. The property of all this waste land is vested in the crown; but any individual may obtain a portion as a possession, by merely paying into the public granaries the estimated part of the produce as rent to the government. The little spots of ground, however, which each husbandman occupies, seldom yields more produce than pays his rent and supplies his family. Though abundantly industrious, the Chinese cultivators are deficient in agricultural skill; and it may be said of them, in general, that they are rather gardeners than farmers. A peasant, indeed, with as much land as he and his family are able to work with the spade, will raise a much greater quantity of food from that spot than an European could do; but in the management of a large farm he would be found greatly deficient.

Ornamental Gardening.] Although the Chinese have no idea of the many artificial methods by which European gardens are enriched with such variety and excellence of vegetable productions, they are extremely ingenious in laying out and ornamenting their pleasure grounds. The imperial pleasure grounds of Yuen-min-yuen, near Pekin, occupying nearly 60,000 acres, and comprehending thirty separate palaces, as well as those of Je-hol, beyond the Great Wall, are magnificent samples of the Chinese taste and skill, not surpassed, either in magnitude or the constant succession of beauties, by any thing in Europe.

Manufactures.] In a country which proposes to subsist independent of foreign commerce, manufactures must be numerous, to supply the wants of the inhabitants. Notwithstanding their isolated character as a nation, the Chinese have strong imitative powers, and have given many instances of dexterity in making, after European copies, watches, mathematical instruments, trinkets, &c. But it has been remarked, that those nations which succeed most readily in arts which are merely imitative, are least remarkable for original inventions. Accordingly, in the sciences, they are very far behind, and have little to boast of in respect of the fine arts. In printing and engraving, however, they appear to have taken the lead, and in the manufacture of silk and cotton cloths, and especially in their earthen ware, they still equal, if they do not excel, the Europeans.

Engraving and Printing.] From their constant use of seals as signatures to all deeds and public documents, engraving is probably an art of great antiquity among the Chinese. Their works of this kind in wood, mother-of-pearl, and ivory, are well known; and their hollow spheres, included within each other, are often preserved as curiosities in public col-

lections. Out of one solid ball of ivory they will carve fifteen hollow globes, all distinct from each other, all moveable by a touch, and ornamented with figure and open work, like the sticks of a fan. Yet these singular productions of art, which appear to require so much labour and skill, are soon finished and sold for a trifle. Their art of printing is said to have been known to them more than nine centuries before the Christian era; but the process is extremely different from that practised in Europe. The nature of their language, in which each word is represented by a distinct character, prevents them from having moveable types, to be set up as occasion requires. When a book is to be printed. a copy of it is written in a fair character, on very thin paper. Each leaf is pasted on a board of hard wood, and the engraver cuts out all spaces between the strokes of the letter, which are thus left in relief. Each board contains two pages. With a brush it is laid over with ink; a sheet of paper is applied, a softer brush is passed over it, and an impression is taken. The paper is printed only on one side, but the sheets are folded back, and form two pages. When they are bound, they are fastened by the open side, leaving the fold to form the outward margin of the leaf. A few moveable types of the most common character are sometimes, but very rarely, used.

Paper.] The Chinese claim the invention of paper,—the first, they say, having been made from the bark of a tree (*Morus papyrifera*) and old linen, by Tsailun, a mandarin who flourished about a century and a half before Christ. The bark of that tree, and the ko-ch-hu, hemp, nettles, straw, the coccoons of the silk-worm, cotton, rags, and the fibres of the bamboo, are the materials now used; from the second of these the most common sort is made; whence *ku-chu* has become the usual term for paper. The inner bark of the bamboo, after maceration in water, is reduced to a paste by boiling and bruising in a mortar; it is then spread out on frames of fine bamboo threads, and formed into sheets of various lengths. A strong rose-coloured transparent paper is used in the windows at Peking as a substitute for glass.

Ink.] To China we are indebted for that excellent ink universally used by our artists under the name of Indian ink. It is made of the soot deposited by the smoke of pines or oil, and has been long an article of manufacture. Hwei-cheu-fu, near the south-eastern boundary of Kyang-nan, is the place where it is brought to the greatest perfection.

Hair-pencils.] We are probably also indebted to the Chinese for the invention of what are called camel's hair-pencils. The fur of rabbits is that of which they are generally made, and they are as indispensable to the Chinese in writing as pens are to us.

Porcelain.] Of all their manufactures, the Chinese are most celebrated for their pottery. Its peculiar excellence made it long an import of considerable value, gave its name to the finer kinds of pottery among ourselves, and rendered it a favourite article of luxury in the courts of Central and Western Asia, long before China was known to Europe. Their materials themselves, and the care with which they are cleansed and prepared, are the real causes of the superiority of the Chinese porcelain over that of most European manufacturers. The forms of their invention, though not always inelegant, have neither the lightness, variety, nor beautiful outline of the Grecian vases; and their designs are inferior to those of European artists. Porcelain is called *Tse-kee* by the Chinese; and King-te-ching, a village to the east of the lake Po-yang-hoo, in the province of Kyang-see, is the place at which the finest is made. This is exclusively

reserved for the emperor. Blue and white are the ordinary colours; red one of the most esteemed and expensive; and gilt figures on a black ground are in great request. In brown earthen-ware the Chinese excel, as well as in porcelain; but they know scarcely any thing about the art of making glass. They use metallic mirrors, and their windows are generally composed of transparent paper.

Silk Manufactures.] Silk is manufactured to a great extent in China. The province of Che-kyang is the country from which the finest, softest, and whitest is brought; but the adjoining province of Kyang-nan has the greatest number of weavers, and all articles intended for the emperor's use are made there, particularly in its capital, Nan-king. The productions of the Chinese looms are said to be more showy than substantial; their brocades are embroidered with silk paper, and are therefore soon spoiled. Gauzes, whether flowered or plain, are the manufactures in which they excel; and those most in use are a strong dull satin, and a close grey taffety. The *Kyen-cheu*, spun by an insect somewhat differing from the silk-worm, and abounding in the province of Shan-tong, furnishes a thick rough material, resembling drugget, and much valued by the Chinese. The silk goods exported to Europe are manufactured in or near Canton, and the raw material is brought from Kyang-nan.

Nankeens.] Kyang-nan also produces the crown cotton, which is manufactured into nankeens; particularly in the city of Nan-king, whence the name of those cotton cloths is derived. Linens, also, are manufactured at Nan-king and in Fo-kyen.

Trade and Commerce.] The external commerce of China, taking its extent into account, is inconsiderable; but its internal trade is extensive. Foreign trade is but barely tolerated by the Chinese government, for it is always at variance with that jealous policy which draws a line of perpetual demarcation between China and the rest of the world. Internal commerce, on the other hand, as it excites no apprehension of a dangerous rivalry, is encouraged. Inland navigation has been carefully improved, so that the whole distance from Canton to Peking, an interval of nearly seventeen degrees, and considerably more than a thousand miles, can, with the exception of one day's journey, be travelled by water. The external trade is carried on principally by foreigners; for every Chinese, who obtains permission to go abroad for commercial purposes, is obliged to return within a limited period, and is treated as an outcast if he exceed that term. Canton is the only port open to Europeans; but a considerable traffic in coarse tea, cattle, furs, cloths, &c. is kept up with the Tartars and Russians upon the northern boundaries. The Chinese carry to Japan rhubarb, jinseng, silks, catgut, sweet-smelling woods, leather, cloths, and sugar, and bring back pearls, gold, copper, sword-blades, paper, and japanned-ware. To Manilla they carry silks, embroidery, varnish, drugs, porcelain, and tea; while birds' nests, dye-woods, pearls, and bullion, are the return. To Batavia they carry tea, porcelain, tutenague, copper, and drugs; and receive silver, tin, pepper, nutmegs, cloves, tortoise-shell, and European goods. Gold, areca, and cinnamon, are brought to Canton from Cochin-China; tin, camphor, resin, birds' nests, ivory, and rhinoceros' horns from Malacca and Siam. The articles exported by the East India Company to China, are lead, tin, copper, furs, camblets, long cloths, &c.; but the principal article is broad cloth, the annual export of which cannot be much less than £1,000,000 sterling. The other articles may be about £300,000; which, together with certain articles, which the officers of the

company's ships have the privilege of taking out, such as peltry, glass, clocks, watches, cutlery, coral, prints, paintings, &c. make the whole amount to £1,500,000. The chief article imported in return, is tea, of which Britain alone takes from 24,000,000 to 30,000,000 pounds weight annually; the rest of the cargoes consist of nankeens and raw silk. The minor articles, such as porcelain, lacquered and ivory goods, cinnabar, drugs, and mother-of-pearl, are principally confined to the private trade. The cost and charges of the total imports in the company's ships amount to about £3,300,000, and the sales to about £4,200,000;—thus yielding £900,000 of clear profit to the company in its trading capacity.

The trade of China with India, is principally carried on from the two presidencies of Calcutta and Bombay. The chief articles are cotton and opium. The value of the shipping and merchandise required for carrying on this trade is estimated at upwards of £2,200,000, exclusive of peckhuck, pearls, and sandal wood, &c.; and pepper, betel-nut, rattans, &c. from the east coast and the islands. For many years, the balance of trade between China and Great Britain, was greatly in favour of China, and required large sums in specie to be sent out annually; but towards the conclusion of the late war, when specie was most difficult to be procured, and its value was greatly increased, this country most fortunately drew through India a balance in bullion from China, and thus the Indian commerce with the port of Canton, became of the utmost importance. The balance in favour of India, still continues to be drawn from China, in the shape of bullion. On the northern frontier of the Birman dominions, an active trade is carried on with China and other eastern states. The chief emporium is at a place called Banmo, on the Chinese frontier; and at Midai, four or five miles to the northward of Amerapura, Mohammedan and Birman merchants of Ava, go to Banmo to meet the Chinese, part of whom, not unusually four or five thousand, come down to Midai. The Chinese import copper, orpiment, quicksilver, vermillion, iron pans, silver, good rhubarb, tea, fine honey, raw silk, spirits, hams, musk, verdegris, dry fruits, and a few fresh fruits, with dogs and pheasants. The Chinese travel on small horses and mules, and are said to be two months on the road. The tea that is brought by the Chinese is black, and is made up in round cakes or balls; some of it is of very fine flavour, and it is all of a very different description from any which is sold in the market of Canton—the better qualities are well adapted for Europe: the retail price is but one tikal; little more than a rupee for one vis, or nearly four pounds. This tea is used by all who can afford it, but a cheaper sort, said to be the produce of some part of the Birman territory, is an article of great and general demand. It is eaten after meals, with garlic and sesamum oil, and it is customary to offer it to guests and strangers as a token of welcome. The return of the trade with the Chinese are chiefly cotton, ivory, and bees' wax, with a small quantity of British woollens, chiefly broad cloths and carpets. The quantity of cotton is annually very considerable, it is estimated at not less than 70,000 bales of three hundred pounds each: the greater part of it is cleaned: the Ava cotton of the lower provinces is of a short staple, but that of the upper, long, and of a fine texture. The cotton of Pegu, it is said, is sent to Chittagong and Dacca, and is the material of the fine Dacca muslins.

The following is a table of the annual value of the trade between Great Britain and China in the years 1825-6-7:

	Value of Exports and Imports between India and China. On account of Individuals	On account of the Company.	TOTAL.	Value of Exports and Imports between England and China on account of the Company.	Total value of the British Trade with China.
1825-26...	£3,943,729	£291,603	£4,235,332	£2,687,013	£6,922,345
1826-27...	3,764,404	362,405	4,126,809	3,176,901	7,303,710

	Value of the Trade of Individuals with China as above.	Value of the Trade of the Company with China.	Total values as above
1825-26...	£3,943,729	£2,978,616	£6,922,345
1826-27...	3,764,404	3,539,303	7,303,710

Money.] The only regularly stamped coin among the Chinese is the *tseen* or *cash*, as it is called by Europeans. A thousand of them make a *tale.* It is of copper, about nine-tenths of an inch in diameter, with a small square hole in the middle, inscribed with two Chinese words on one side, and two Tartar ones on the other. The hole is made for connecting a number of them together with a string. Silver is not coined, but is disposed of by weight, and is divided into larger or smaller pieces according as it may become necessary. Scales, weights, and scissars, are therefore necessary for every payment. The value of an article is estimated according to the current price of an ounce of silver. Silver coin of any denomination is received according to its intrinsic value ; and Spanish dollars are the sort most current. Their accounts are kept in *tales*, *mace*, *candareens*, and *cash*, thus :

10 cash=1 candareen,
10 candareens=1 mace,
10 mace=1 tale.

72 candareens make a Spanish dollar, and the exchange between China and England is usually 40 per dollar. £100 sterling would consequently be 360 tales, or 500 Spanish dollars. A tale is worth 5*s.* $6\frac{2}{3}$*d.* British currency. The authorized rates of interest are as high as 36 per cent., and from 15 to 18 per cent. may always be obtained. Money-lending is a trade well suited to the genius of the Chinese ; and there is no country in the world where the pawnbroker's business is better understood, or more extensively practised.

Weights and Measures.] The number of grains which the *hwang-cong* or musical reed will contain, is the basis of all the Chinese weights and measures. In our ignorance of their terms, it can be of no service to copy their tables of admeasurement.

CHAP. IV.—POPULATION—MANNERS AND CUSTOMS—RELIGION —LANGUAGE, LITERATURE, AND SCIENCE.

Population.] In the table of the provinces of China, given at the commencement of this article, the population will be found to be estimated at something above 143 millions. This is according to an official return made by order of the emperor, in A.D. 1790 ; and considerable reliance may be placed on it, as official returns, from the mode of forming them in China, have much likelihood of being materially correct. Every householder is required, under a penalty, to have a tablet, called *men-p' nai* (the tablet of the gate) on which all his inmates are faithfully enumerated,

ready for the inspection of the officers appointed to take an account of the population, who are not allowed to examine the house when there are any women or children in the family. By this means, the number of the great body of the people may be considered as pretty accurately ascertained. The statement, also, corresponds very nearly with the report of Mr Thomas, who classed the population of China as follows:

Dwellers on the land, ...	143,000,000
Dwellers on the water, ...	2,000,000
Persons in civil offices, ...	9,611
Military officers, ...	7,552
Infantry, ...	822,000
Cavalry, ...	400,000
Followers of the army, ...	31,000
	146,270,163.

So that, between the two accounts, 145,000,000 may be taken in round numbers as the sum-total of the Chinese population. The statements of the Catholic missionaries and of lord Macartney, on this subject, are now generally considered to be quite erroneous. It is remarkable that in none of the tables of population in China are the towns or cities classed separately—the estimation being merely divided under the comprehensive heads of *provinces*.

Manners and Customs.] The manners and customs of the Chinese, who, without being mere savages, have lived for many ages in a state of almost entire seclusion from all intercourse with the other inhabitants of the globe, form a peculiarly interesting subject of inquiry; and we therefore propose, under this general head, to enter into more detail than usual, regarding the physical constitution, habits, domestic economy, religion, &c. of this singular people. The following able summary of the general appearance of the country and its inhabitants, extracted from the 'Supplement to the Encyclopædia Britannica,' will be of service in introducing our more minute details; while the view given in another chapter of the government, laws, &c. of the Chinese will afford a material assistance to the reader in forming his estimate of their national character.

General Appearance of the Country and its Inhabitants.] "When an European first sets his foot in China, he will find the appearance of the country, the buildings, and the people, so totally different from any thing he had before seen, that he might fancy himself to be transported into a new world. In the long line of internal navigation between the capital and Canton, of 1,200 miles, with but one short interruption, he will observe every variety of surface, but disposed in a very remarkable manner in great masses; for many days he will see nothing but one uniform extended plain, without the smallest variety; again, for as many days, he will be hemmed in between precipitous mountains of the same naked character, and as unvaried in their appearance as the plains; and, lastly, a 10 or 12 days' sail among lakes, swamps, and morasses, will complete the catalogue of monotonous uniformity; but whether he crosses the dry plains of Petchelee and Shauntung, abounding with cotton and all varieties of grain and pulse,—the more varied surface of Kiang-nan, fertile in silk, in yellow cotton, in fruits, in the staple commodity of grain, and in every thing that constitutes the luxuries, the comforts, and the necessities of the people,—the dreary swamps, morasses, and extensive lakes of the northern part of Kiang-see, where men subsist by fishing,—or its naked and picturesque mountains to

the southward, famous for its porcelain manufactories,—or whether he descend to the fertile plains of Quan-tung, on which almost all the vegetable products of the East may be said to be concentrated, the grand characteristic feature is still the same—a redundant population. Every where he meets with large masses of people, but mostly of one sex; thousands of men in a single group, without a single woman mixing among them—men whose long gowns and petticoats give them the appearance of the softer sex, while these are sparingly seen at a distance in the back-ground, peeping over the mud-walls, or partially hid behind trees or bushes; whose short jackets and trowsers would make them pass for men among strangers, if their braided hair, stuck full of flowers, and their little cramped and bandaged feet, did not betray their sex. He will be pleased with the unequivocal marks of good humour which prevail in every crowd, uninterrupted and unconcerned by the bawling of some unhappy victim suffering under the lash of magisterial correction; and he will be amused at the awkward exertions of the softer sex to hobble out of sight, when taken by surprise; but his slumbers will be interrupted on the nights of the full moon by the nocturnal orgies of squibs and crackers, gongs and trumpets, and other accompaniments of boisterous mirth.

A constant succession of large villages, towns, and cities, with high walls, lofty gates, and more lofty pagodas, large navigable rivers, communicating by artificial canals, both crowded with barges for passengers, and barks for burden, as different from each other, in every river and every canal, as they are all different from any thing of the kind in the rest of the world,—will present to the traveller an animated picture of activity, industry, and commerce. He will behold, in the lakes and morasses, every little islet crowned with villages and mud hovels. He will observe birds (the leutse or cormorant) catching fish; and men in the water, with jars on their heads, fishing for birds. He will see shoals of ducks issuing from floating habitations, obedient to the sound of a whistle; carts on the land, driven by the wind; and barges on the water, moving by wheels, like those recently *invented* in Europe, for propelling the steam-boats. Among other strange objects, he will observe, at every ten or twelve miles, small military guard-houses, with a few soldiers fantastically dressed in paper helmets and quilted petticoats, making use of the fan, if the weather be warm, and falling on their knees, if an officer of rank should pass them.

He will observe that the meanest hut, with walls of clay, and a roof of thatch, is built on the same plan, and of the same shape, with the palace of the viceroy, constructed of blue bricks, and its tiled roof supported on pillars. He will notice that the luxury of glass is wanting in the windows of both; and that, while one admits a free passage to the air, the other but imperfectly resists the weather, and as imperfectly admits the light, whether through oiled paper, silk gauze, pearl shell, or horn.

Nothing, perhaps, will more forcibly arrest the attention of the traveller than the general nakedness of the country as to trees and hedge-rows, of which the latter have no existence, and the former exist only in clumps near the dwellings of the public officers, or the temples of Fo, or Tao-tse. No green meadows will meet his eye; no cattle enliven the scene; the only herbage is on the narrow ridges which divide the plots of grain, or brown fallow, as in the common fields of England. The terraced hills he will probably observe to be terminated with a clump of trees, or a pagoda, the only objects in the distance that catch the eye. But the bridges on

the canals, of every variety of shape,—circular, elliptical, horse-shoe, gothic—slight and unstable as they are, are objects that, by their novelty and variety, must attract notice; and the monumental architecture, which adorns the cemeteries under every form, from the lowly tent-shaped dwellings to the loftiest column,—the elevated terraces, supported by semicircular walls,—and the round hillocks, which, in their graduated size, point out that of the father, the mother, and the children, according to seniority,—are among the most interesting objects that China affords.

If, by chance, he should be admitted within the gates of one of their great cities, as Pekin, Nankin, Sau-tcheou-foo, Hang-tcheou-foo, or Canton, he may fancy himself, from the low houses with curved overhanging roofs, uninterrupted by a single chimney, the pillars, poles, flags, and streamers, to have got into the midst of a large encampment. The glitter arising from the gilding, the varnishing, and the painting, in vivid colours, that adorn the front of the shops,—and, in particular, the gaily painted lanterns of horn, muslin, silk, and paper,—the busy multitude all in motion, and all of one sex,—the painted and gilded inscriptions that, in announcing the articles dealt in, assure the passengers that, "they don't cheat here,"—the confused noise of tinkers, cobblers, and blacksmiths, in their little portable workshops,—the buying, selling, bartering, and bawling, of different wares,—the processions of men, carrying home their new-married wives, with a long train of presents, and squalling and noisy music; or carrying to the grave some deceased relation, with most lamentable howlings—the mirth and burst of laughter occasioned by jugglers, conjurors, mountebanks, quack-doctors, musicians, and comedians; in the midst of all which is constantly heard a strange twanging noise from the barber's tweezers, like the jarring sound of a cracked Jew's harp,—the magistrates and officers, attended by their lictors, and a numerous retinue, bearing flags, umbrellas, painted lanterns, and other strange insignia of their rank and office;—all these present to the eyes and ears of a stranger a novel and interesting spectacle. The noise and bustle of this busy multitude commence with day-light, and cease only with the setting of the sun; after which, scarcely a whisper is heard, and the streets are entirely deserted.

Towards the central parts of China, near to the places where the two great rivers, the Whang-ho and the Yang-tse-kiang, intersect the Grand canal, a scene, magnificent beyond description, will arrest the attention of the traveller; here he will find himself in the midst of bustle and business. The multitude of ships of war, of commerce, of convenience and of pleasure, some gliding down the stream towards the sea, others working against it by sails, oars, or wheels, and others lying at anchor; the banks on either side, as well as those of the canals, covered with towns as far as the eye can reach; the continuance along the canals of cities, towns, and villages, almost without interruption,—the vast number of light stone bridges, of one, two, and three arches,—the temples occurring in frequent succession, with their double and triple tiers of roofs—the Pei-los, or triple gateways, in commemoration of some honest man or chaste virgin,—the face of the surrounding country, beautifully diversified with hill and dale, and every part of it in the highest state of cultivation,—the apparent happy condition of the numerous inhabitants, indicated by their cheerful looks and substantial clothing, chiefly in silk,—such are the scenes which presented themselves to our countrymen who composed the embassy of the Earl of Macartney, and were repeated to those who accompanied Lord Amherst. He would probably be mistaken, however, in inferring the general

happy state of the people, or beautiful appearance of the country, from what might occur along this great line of communication between the northern and southern extremities of the empire. The Dutch embassy setting out in the winter, when the canals were frozen, proceeded by a different route, and the inconveniences they suffered, are such as can scarcely be credited to have occurred in any nation removed but a few degrees from the savage state. The face of the country was dreary, without a visible trace of cultivation, or a hovel of any kind, for the space of eight or ten miles together. In many parts the surface was covered with water, and the mud hovels completely melted down. Very few cities, towns or villages, occurred in their route, and those were almost universally in a ruinous condition. Near to the capital they passed a city exhibiting only a mass of ruins. It was not before they had crossed the Yellow River that the prints of wheel-carriages marked out the road. The people every where appeared indigent and oppressed, equally destitute of the feelings of humanity and hospitality. The Dutch were carried in small bamboo chairs, each having four bearers, so weak and tottering that they could seldom go through the day's journey; and it frequently happened that they halted in the middle of a cold night, in an open and uninhabited part of the country, exposed to all the inclemency of the weather, without a hovel of any kind to afford them shelter; and when they reached the end of the day's journey, the lodgings appropriated for their reception were so miserable, admitting, on all sides, the wind, rain, or snow, that they generally preferred taking a little rest in their bamboo chairs. They observed on the road old men and young women travelling in wheelbarrows, sometimes in litters or chairs carried by a couple of asses, one being fixed between the poles before and one behind. The rivers were without bridges, and crossed, when not fordable, by rafts of bamboo. All this is corroborated by a subsequent publication of *Voyage a Pe-king*, by M. de Guignes: and hence it may be concluded, that China, like other countries, has its fertile and its desolate districts, and that much information is yet required to form a competent notion of the real state and condition of this mighty empire."

Physical Constitution.] The physical constitution of the Chinese indicates a Tartar origin, although, from inhabiting a warmer climate, they are inferior to the Tartars in strength of character and firmness of nerve. Both have those peculiarities of feature and complexion which distinguish almost all the northern Asiatics. A complexion olive or brunette; hair and eyes black, the latter small, and elliptical at the end nearest to the nose; foreheads wide; cheek-bones high; chins pointed, which, with the mode of shaving the hair, gives to the head the appearance of an inverted cone; noses flat, ears large, figure in general broad and square—these are the most striking characteristics of the Tartar and Chinese race. A resemblance between the Chinese and the Hottentots of Africa has been pointed out by Mr Barrow. "The form of their persons," he says, "in the remarkable smallness of the joints and the extremities, their voices and manner of speaking, their temper, their colour and features, and particularly their singularly shaped eye, are nearly alike. They also agree in the broad root of the nose, or great distance between the eyes, and in the oblique position of these, which, instead of being horizontal, as is generally the case in European subjects, are depressed toward the nose." From these facts, Mr Barrow thinks it probable, that an ancient intercourse subsisted between China and the eastern coast of Africa; nor is the physical likeness greatly overweighed by mental dissimilitude; for making allowance

for the difference of education, he considers that the aptitude of a Hottentot in acquiring and combining ideas, and his powers of imitation, are not less than those of a Chinese.

Ranks.] The people of China may be arranged under seven general classes: the Mandarins or officers of the state, the military, men of learning, priests, husbandmen, merchants, and artisans. The term *Mandarin* is a Portuguese word, unknown to the Chinese, but applied by the Jesuit missionaries to those in authority generally. Of Mandarins, the degrees are numerous, both in the civil and military service; but it would be tedious and unprofitable to enter into any detail regarding these, or the different badges by which they are distinguished. Honours are not hereditary in China, with the exception of those held by the descendants of Confucius and Mencius, and those possessed by the Princes of the Blood Royal. There may be said to be no middle class of men in China. If an individual, by trade or industry in his profession, should accumulate riches, he is obliged to enjoy them as much in private as possible, for the commanding officer of the district would find little difficulty in bringing him within the pale of the sumptuary laws, and in laying his property under confiscation.

Dress.] The chief part of the Chinese dress, like that of many eastern nations, consists of a long robe which reaches almost to the ground: the sleeves, which at the shoulders are wide, and which become straiter at the wrist, cover almost the whole of the hand. This robe is folded one part over another, and fastened on the right side by several buttons of gold or silver. Over the robe is worn a girdle of silk, of which the ends generally extend to the knees. In a sheath suspended from the girdle, are a knife and a pair of small sticks which are used as forks. Their shirts are short and wide; they are made of different kinds of cloth, though generally of cotton, and are sometimes prevented from adhering to the skin, by a silken net which is worn under them. Their drawers which are wide, are made sometimes of linen, sometimes of cotton; but in winter such as can afford it, have them lined with fur. When the weather is warm, the neck is bare; but when cold, it is covered with a collar, or necklace, made of silk or fur, and fastened to the upper garment. In winter, the people of rank in the north line the whole upper garment with fur. Others must be contented, to preserve appearances, by having fur trimmings. On the long robe, a kind of upper garment is sometimes worn, of which the sleeves are very wide but short. The Chinese are by no means a cleanly people, either in their persons or dress. They seldom change their under garments for the purpose of washing them; never employ the bath, either cold or warm; make no use of soap, and scarcely ever wash their bodies; and even the interior wrappers of the ladies' feet, are allowed to remain as long as they will hold together. They carry no pocket-handkerchiefs; but wipe their dirty hands upon the sleeves of their gowns, and blow their noses into small pieces of paper, which their attendants have at hand for the purpose. They sleep at night, huddled up under a coverlid, nearly in the same clothes which they wear through the day; a circumstance which, together with their general filthiness, is productive of an abundant tribe of vermin, which the highest officers of the empire will not hesitate to call their attendants, even in public, to take from their necks, when they are troublesome; and which, when caught, they very composedly put between their teeth.

Almost the only innovation which the Tartars, when they conquered

China, were able to introduce, was in the wearing of the hair. The Chinese had been accustomed to preserve it with great care; the Tartars obliged them to cut off the greater part of it. They now wear only a lock upon the crown, plaited into a long tail something like the lash of a whip, and extending below the waist sometimes to the calf of the leg. The covering of the head is generally in the form of an inverted cone. The outside is of cane, wrought in a fanciful manner, and the inside is lined with satin. On the top, which terminates in a point, is generally worn a tuft of red hair. This head-dress, though common, is not universal, since the Chinese have hats of many different shapes. Sometimes they are in form like a bell, and sometimes with very broad brims, and a small shallow space for the head. Those of the upper ranks never go abroad without boots, made sometimes of cotton, but more generally of satin, or some other kind of silk, except when they ride, and then they have them made of pliant leather. When at home, they wear slippers of silk. The slippers of the common people are of black cotton cloth. No inhabitant of China reckons himself completely dressed without his fan.

The different ranks in China are distinguished by different ornaments, and different dresses. The royal colour is yellow. The different classes of mandarins are distinguished by knobs, or buttons of different colours, worn in the cap. The cap is white, lined with red. The peculiar ornaments appropriated to different ranks, cannot be assumed by one of a different rank, without subjecting the offender to a severe punishment. White is the colour of mourning in China.

The dress of the women among the lower orders differs little from that of the men. A cotton frock, tawdry coloured trowsers, drawn tight by the calf of the leg, to show off an overgrown ankle, swathed round with party-coloured bandages, and a dwarfish foot, ornamented with embroidery, are the principal articles in the female dress, which are decorated with artificial flowers, &c. according to the taste and circumstances of the wearer. Paints are used universally. The teeth are tinged green and yellow; and the nails, among the higher classes, kept unpared till they often reach a length of 12 inches. Bamboo sheathes are used to preserve them. The desire of appearing agreeable has nowhere forced upon human beings a custom more preposterous, than that adopted by the Chinese ladies, of making their feet as little as possible. A female child is no sooner born, than her feet are tightly wrapped up, so as to prevent them from attaining their natural magnitude. At different periods these bandages are renewed, till, by continued torture, the foot is effectually confined to the fashionable size. The shoe of a full grown lady of quality, is often not more than four inches in length, and less than two in breadth. Instead of walking, she hobbles with an awkward and painful motion, so that a Chinese beauty is what in other countries would be called a cripple.

The laws of China prohibit the dressing of children in silks and furs. The head cannot be covered, till the individual be of a certain age. The assumption of the cap, like that of the toga among the Romans, is accompanied with considerable ceremony. The person is informed that now he has assumed the dress of a man, that he ceases to be a boy, and that he ought, therefore, to distinguish himself by his actions, as well as by the manly habit.

Houses.] The Chinese have not received their rules of architecture from any other nation. Their structures are totally unlike to any thing in Europe. To him who has formed his taste by the orders established in

the Western world, their buildings, no doubt, appear fantastic; but they must be confessed to have a species of beauty peculiar to themselves, and of which it would be difficult to give a precise idea. Such an idea may be most advantageously acquired from representations of Chinese architecture. The buildings of the Chinese, both public and private, are of wood, and when intended for dwelling houses have rarely more than one floor. For both these circumstances the same causes have been assigned. The frequent earthquakes make low houses, built of the lightest materials, the most eligible. The extreme dampness of the climate, joined to the warmth of the southern and the cold of the northern provinces, make houses built of stones at all times inconvenient, and on some occasions uninhabitable. From some buildings still remaining, it appears that houses of many floors were formerly in use, but they have long yielded to the more convenient dwellings of one floor. The houses of the middle and lower classes are generally much crowded. A multitude of small apartments are separated from each other by slight partitions, or by mats. Each of these apartments is inhabited by what, in Europe, would be called a distinct family. The whole building is surrounded by a wall six or seven feet in height, within which dwells a Chinese family, often consisting of three generations, with all their wives and children. If the population in China, therefore, were estimated from the number of houses, the calculation must be made on principles different from those common in Europe. Except in cities, the houses are seldom collected in groups. They are scattered about the country in unconnected situations. They are said to exhibit a neat and cleanly appearance. Each house has a separate apartment, in which the whole inhabitants eat.

Marriages.] In China polygamy is not absolutely forbidden: but decency, good sense, and sometimes poverty, confine by far the greater part to one wife. The desire of issue, particularly of male issue, sometimes prompts him who despairs of having children by his first wife, to take a second, who, when he has attained his wishes, is generally dismissed. But though a man cannot, with propriety, have more than one wife, he is allowed to have several concubines, a privilege, from the abuse of which, the poverty of the generality of the people is a sufficient preventative. Besides the condition of a concubine is so disagreeable, that few are willing to dispose of their daughters for that purpose. They are in complete subjection to the lawful wife. They serve her on all occasions. Their children are accounted hers, and address her alone as their mother. Marriage cannot, in several cases, be legally contracted. If the woman be formerly betrothed, the marriage is void. If the female, who has been represented as being beautiful, appear to be in reality ugly, the contract is not binding. No mandarin can marry the relation of a family belonging to the province which he governs. No marriage can be consummated, while any of the parties are in mourning, or under the pressure of a severe misfortune. Two brothers cannot be married to two sisters, nor can a widower give his son to the daughter of that widow whom he may choose for his own wife. The women are closely confined, not being permitted to converse with any of the male sex, unless some of their nearest relations. He, therefore, who is in quest of a wife, is never permitted to see his mistress. He trusts entirely to the information of a female mediator, who reports the character and the possessions of the intended spouse In Europe, a lover, when employed in the praise of his mistress, is often accused of describing imaginary charms. If ever an unmarried inhabitant of China attempt any

thing like love-poetry, he must be literally guilty of the same fault. When the sum has been settled which the bridegroom is to pay for the bride, every preliminary is supposed to be adjusted. When the fixed day of consummation arrives, the bridegroom places himself at his gate, dressed in his gayest apparel. He there waits the arrival of the bride, who approaches locked up in a close palanquin, of which a faithful domestic carries the key. It is delivered to the impatient bridegroom, who, it may be supposed, with considerable agitation, proceeds to open the door of the palanquin, and to find his hopes and his wishes confirmed or disappointed. If the female answers not the picture which his imagination has been taught to form, and if he be able and willing to pay her parents a sum equal to the price already given for her, he shuts the door and sends her back without ceremony. If he conceives that he has reason to be satisfied with his bargain, he makes the bride descend. To display the gentility of her feet, she totters into his mansion; and the scene is concluded with that festivity, which, on such occasions, is common in all countries. The recluse life of a Chinese woman does not terminate with her marriage. She is still secluded from the conversation of all but her domestics. The husband who strictly observes the ceremonial law, has in his house, at least, two apartments, the most remote for his wife, the other for himself. She must not quit her apartment without some urgent reason. It is even indecent for the husband too frequently to intrude upon her privacy.

Divorce is allowed in China for several causes, of which some, in Europe, would be accounted very frivolous. Adultery subjects the party not only to be divorced, but to be put to death. A man may divorce his wife if he appear to have any rational cause to be jealous of her. Mutual dislike, or incompatibility of temper, authorize a man to put away his wife. Even loquacity is, in the book of ceremonies, reckoned an offence sufficient to subject her to that punishment. The prevalence of such a law in Europe would probably silence many a fair orator. If a woman however, has lost her parents or former husband, and has mourned for them three years, she becomes a privileged person, and cannot be divorced for any of these slight causes. The woman who absconds from her husband, if she can be recovered, becomes his slave. The female sex, however, is not without its privileges. If a husband abandons his wife for the space of three years, by laying her case before a mandarin, she may be authorized to take another husband. When the law gives a husband so much power over his wife, nothing is more likely than that, in many instances, it will be abused. The wives, accordingly, are often kept in the greatest subjection; are forced to wait behind their husbands while they eat at table, and to perform all the drudgery of a menial servant.

Marriage of the Dead.] In the interior province of Shansi, if two friends happen to lose, the one a son and the other a daughter, unburied at the same period of time, which is not unfrequent, since they frequently keep the bodies at home for a year or two, then the parents agree to marry them. They send the usual presents with much ceremony and music; after which the two coffins are placed together, and the wedding dances celebrated before them. These ceremonies performed, they are then laid in the same tomb; and the families are thenceforward considered as related.

Births.] The birth of a son is a season of great rejoicing. As soon as born, he receives his *ming*, i. e. little or infantine name; but girls enjoy

no such honour, being called simply first, second, third, &c. according to seniority. At the age of twenty, he receives his *tsa*, or manly name. There is also a common surname borne by every individual of the family. None of the Chinese rules of good-breeding are more precise than those which regulate the use of names. The emperor has various names for various occasions, such as the imperial name, the year name, the posthumous name, &c. The imperial name of the reigning emperor is *Tao-kwang*, 'the light of reason.' The Chinese cannot be freed from the charge of female infanticide; but travellers have greatly exaggerated the extent of this crime. Early marriages are constantly encouraged by the parents, and almost enforced by religion, so that many engage in the conjugal state without the power or prospect of maintaining a family. When such is the case, the parents sometimes are tempted to expose their female offspring in public places, that they may have a chance for maintenance, by being found by those officers whom government has appointed for this purpose. This cause of the exposure of children exists in Europe, and we may expect, that in China, where the population is so great, and where subsistence is so precarious, it must operate still more powerfully. To this cause of exposing children, another must be added. In several of the provinces of China, the bonzes, or priests, under the influence of a fanatic cruelty, by them called religion, have persuaded their ignorant votaries, that to throw their children into a river, is to perform an acceptable service to the deity of the stream—a superstition not peculiar to the Chinese. The whole number of children, however, found in rivers and upon the highways, have not been exposed alive. Owing to the expensive nature of Chinese funerals, the parents frequently dispose of them in that manner after they are dead, knowing that they will be interred at the public expense.

Education.] In no country is the connexion between parents and children more close, or the subordination of the latter to the former more complete. A father is accountable for many of the crimes of his children, from a supposition that he might have prevented them. A son continues a minor during his father's lifetime. He is liable to all his father's debts, except such as are contracted by gaming. An adopted son is under the same subjection to his nominal father. If we may believe the writers who have given an account of China, the education of youth is an object of particular attention. The Chinese have been said to put in practice that which only to have proposed has subjected several European philosophers to ridicule. In the higher classes, the education of a child commences with the birth. At six, he is taught the most common numbers, and the names of the principal parts of the universe. He is removed from his sisters at seven, and is no longer suffered to enjoy their company. At eight, he commences the study of the rules of politeness—a study which in China is not the least laborious. At nine, he is expected to be master of the kalendar, and at ten, he is despatched to a public school, where, till he be thirteen, he is employed in initiating himself in the arts of reading and writing. At thirteen, he commences the study of music, and at this time, in former ages, commenced the repetition of the moral precepts, which were all in verse, a custom of which the sages of the nation now lament the loss. At fifteen, the youth commences the practice of the manly exercises. He mounts on horseback, and acquires dexterity in the use of the bow and arrow. At twenty, he receives the cap of manhood, is allowed to change his cotton garments for others

of silk, and is admonished not to dishonour the character which he has now assumed. It may be supposed that the periods of this course of education differ according to the progress of the student; but the statement may serve to give us some idea of a Chinese education. Caution and reserve, as well as dissimulation and selfishness, are among the unavoidable consequences of perpetual coercion; so that even in their earliest infancy they are taught to repress the buoyancy of spirits and the lively emotions which are natural to that age. A Chinese boy has all the affected sedateness, stiffness and formality of a Quaker; and in after life he becomes cold and ceremonious even to his near relations. The education of females is chiefly such as may fit them for their future condition in life, that is, they are taught to love solitude and to be silent; an undertaking which the ill-natured would pronounce impossible. They are inspired with a love of modesty, and if their parents can afford it, they are instructed in such other arts, as, to their useful qualities, may add somewhat that is agreeable.

Domestic Life and Diet.] The Chinese are frugal and retired in their mode of living, and have a regularity and invariableness of domestic habits, not common elsewhere. They rise at day-break, and retire to rest at sun-set, and seldom meet for purposes of social intercourse or amusement. Those who are in affluence are served by slaves and eunuchs, and generally keep sumptuous tables. Rice, vegetables, fish,[1] poultry, and especially pork, are the common articles of diet. The flesh of horses and asses is a favourite dish among the Tartars. The more glutinous any substance is, the more it is relished by the Chinese, and hence they have a great passion for certain sea-weeds. Cakes of unleavened bread, pickles and preserves, fresh fruits cooled in ice, ragouts, soups, and pastry, are common requisites of a Chinese dinner, and go to prove that they are not ignorant of the culinary art. The great body of the common people, however, live very miserably. Rice, garlic, and cabbage, fried in rancid oil, are the choicest articles of their diet; and one of their most delicate dishes is made of birds'-nests. Worms, frogs, rats, dogs, and offal of all kinds, they devour; and stick not even at putrid carcases. A few earthenware jars and basins, with an iron chafing-dish, pot, and frying-pan, form nearly the whole of their household furniture. Tea is an universal beverage; but the poor are obliged to economize it, and boil the same leaves over and over again. What is called wine in China has no resemblance to the wines of Europe. It is, in fact, a spirituous liquor obtained from grain; in the northern provinces from millet, and in the southern from rice. It is perfectly clear and transparent, and is said to be free of that empyreumatic odour, so generally perceptible in European spirituous liquors. From the same materials is obtained, by a different process, a kind of vinous liquor, of a muddy appearance, and said to be disagreeable to strangers.

Chinese Inns.] If it be true, as has been stated, that the degree of

[1] The Chinese have a method of hatching spawn of fish, and thus protecting it from those accidents which ordinarily destroy so large a portion of it. The fishermen collect with care, on the margin and surface of the water, all those gelatinous masses which contain the spawn of fish. After they have found a sufficient quantity, they fill with it the shell of a fresh hen egg, which they have previously emptied, stop up the holes, and put it under a sitting fowl. At the expiration of a certain number of days, they break the shell in water warmed by the sun. The young fry are presently hatched, and are kept in pure fresh water till they are large enough to be thrown into the pond with the old fish. The sale of spawn, for this purpose, forms an important branch of trade in China.

civilization which a country has attained may be estimated by the condition of its inns, Chinese civilization is not yet very great, for the inns of China are generally mean and inconvenient, being for the most part nothing but four walls made of earth, without plaster or flooring, except on the principal roads of the empire, where they are sometimes large and handsome. But it is necessary for travellers who wish to sleep comfortably to carry their own beds (commonly a quilt or two) with them; otherwise they would have to sleep on a mat.

Amusements and Festivals.] Games of chance are the most common amusements of the Chinese. Cards and dice are almost always carried about; and a game called *tsoï-moï*, very common among the populace, is substituted for them when they are not at hand. It is accompanied by great noise and gesticulation. Chess is a common amusement with the higher orders, but it differs from ours in name, place, and movements of the pieces. Cock, quail, and locust fighting, are sports of which the Chinese are immoderately fond; as well as plays and dances, the latter of which are merely wretched ballets. In their public festivals, fire-works make a conspicuous figure. In these they are said to excel Europeans. Among their festivals, one consists in the emperor publicly tilling the ground, a ceremony intended to preserve and nourish a spirit for agriculture, and which is accompanied with much pomp and many exhibitions. Another festival is celebrated at the commencement of the year, during which all public business is suspended, visits are mutually paid, and presents are made. The festival, called the Feast of Lanthorns, is the most extraordinary of all those which the Chinese celebrate. The time of celebration is generally from the 13th to the 16th day of the first month. During that time, in every quarter are to be seen numerous lanthorns, adorned with elegant devices, and illuminated in the most splendid manner. All the deceptions of the magic lanthorn are displayed, and the evenings are concluded with fire-works.

Ceremonies.] In the matter of courtesy, the Chinese surpass all other people in the world; but it is so blended with absurd forms and ceremonies as to betray the heartlessness of their professions, and to make their intercourse with one another a weary round of childish and contemptible forms. They are not only bound to prostrations in the emperor's presence, but have a set of phrases which it would be death to forget when addressing him; and the profundity of the bow, and the posture of the body required on every different occasion, from an interview with the emperor himself to a visit from one tradesman with another, are made essential parts of legislation and education. As an instance of their excessive ceremoniousness, the following account of an ordinary Chinese entertainment may be given. The person who wishes to be thought in earnest, when he invites his friend to dine at his house, knows that his first invitation will not be accepted. He takes care, therefore, to despatch a card[5] on the evening before, another next morning, and a third just before dinner. The host receives each of his guests at his gate, and with many bows, and much form, introduces them to the hall, where he again salutes them individually. Wine is brought

[5] It will perhaps be thought a remarkable circumstance, that, among the Chinese ceremonies, the missionaries of the sixteenth century have described a custom similar to the modern European use of *visiting cards*; but instead of a mere card, the Chinese visitor leaves a little *book* of about twelve pages, in which nothing is written but his name, with various epithets of submissiveness and reverence towards the person at whose house it is left.

to him in a small cup, of which he takes hold with both his hands. He again makes a bow to each of his guests, and advancing towards the front of the hall, he raises his eyes and the cup towards heaven, and then pours the wine upon the ground. More wine is brought; he pours it into the cup, and hastens to place it on a table before his principal guest. The guest, no less polite than his host, prevents him, by having a cup already on his table, by calling for wine, and endeavouring to place it on a table before the master of the house. When this ceremonial strife, which continues a considerable time, has been adjusted with the principal visitant, it must be repeated with every individual guest; of whom each endeavours to excel the other in the extent, that is to say, the tediousness of his good breeding. All this, however is only an introductory ceremony: the company have not yet had their proper seats assigned them. An upper servant conducts the principal guest to an elbow-chair covered with embroidery. The guest declines the honour, and refuses positively what he is resolved to accept. Each of the visitants is led to his chair with the same ceremony, and with equal strenuousness each of the guests protests against the honour done him. Wine is again brought in, for, in China, to drink before dinner is genteel. The principal waiter, falling down on one knee, begs the guests to take a glass. Each lays hold of his cup with both his hands, raises it to his forehead, then brings it lower than the table, and then, with deliberation, he raises it to his mouth, and drinks slowly, taking several draughts. The first course is introduced; each produces his small sticks, which serve him in the place of knife and fork. But though the meat be presented, none presumes to eat, till the waiter earnestly begs the guests to partake of what is offered. At the same instant each commences; the little sticks are brandished, and the meat is conveyed to the mouth, while the whole company, observing each others motions, keep time with a regularity little inferior to that necessary in military evolutions. The entertainment generally consists of twenty-four dishes, of which each is introduced and begun with the same ceremonials, and eaten with a similar regularity. Frequent draughts of wine are taken during the repast, but the same regularity is not observed as at first. The first part of the entertainment is concluded with tea. After tea, the guests retire to another hall, or to a garden, till the dessert be introduced, which, like the dinner, consists of twenty-four dishes, or, more properly, courses, and which is eaten with ceremonies differing little from those already described. After the dessert, larger cups are set down, and the guests are requested to drink more freely. It may be easily supposed that these entertainments, with all their attendant forms, occupy a considerable time. They begin early in the evening, but are never terminated before midnight. Each of the guests, when he departs, gives a small sum to the domestics. He then goes home in a chair, preceded by several servants, bearing lanthorns formed of oiled paper, on which are inscribed the name and quality of their master. Next day each of the guests returns a card of thanks to their host. In the course of the entertainment, dramatic representations are sometimes displayed. The women are never permitted to form part of any company; when the plays are acted, they are placed in such a situation, as to see them without being seen.

From this specimen may be inferred the general formality of Chinese manners; and the European advocates for the forms of what is called good breeding, may very reasonably despair of ever being able to equal their eastern friends.

When such are the ceremonials of a private entertainment, it is not to be expected that public business will be less formal. When Macartney was

received as ambassador at the Chinese court, a long dispute took place concerning the mode in which he was to salute the emperor, or his empty throne. The Chinese required a complete prostration, an act which the ambassador conceived to be too humiliating; and it was not till after a considerable altercation, that the British were permitted to testify their respect to the Chinese monarch, in the same form as to his Britannic majesty.

Funerals.] The formality which has accompanied a native of China during his life, does not leave him at his death. To appear, then, with suitable decorum, employs the thoughts of half his life, and half the produce of his labour is expended on an elegant coffin, to be laid up in the most conspicuous part of his dwelling, of which it constitutes the most valuable furniture. The greatest misfortune which attends poverty is the inability to purchase a coffin; and the filial piety of a son has sometimes extended so far as to induce him to sell his liberty, that with the price he might purchase for his father this necessary apparatus of mortality.

When a person dies, he is immediately dressed in his best clothes; and, if during his life he enjoyed any office, he is decorated with its badges. He is placed in his coffin, where he remains in state generally seven days. His nearest relations remain in the house, and his other friends wait on him every day to pay their respects. The hall of ceremony is hung with white. Before the coffin is placed a table, on which stands his image, or an ornament, on which his name is inscribed, with lighted candles, perfumes, and flowers. The visitants salute the deceased as if he were in life; they approach, and, bending downwards, touch the earth several times with their heads. These salutations are returned by the nearest male relations of the deceased, who lie concealed behind a curtain in a back corner of the room; they creep out, upon their hands and their knees, towards those whom they are to salute; and, without rising, creep back again. The females, concealed behind the same curtain, by their shrieks, at regular intervals, testify their grief.

After these ceremonies have continued for several days, and after every friend has received repeated invitations to attend the funeral, the procession at length commences. A great number of men march in the front, carrying images of slaves, and different kinds of beasts. Others follow them, with standards, flags, and censers filled with perfumes. A band of music immediately precedes the coffin, playing the most melancholy airs. The coffin is placed upon a kind of machine, supported by a great number of men, and covered with a splendid canopy. The nearest relation follows, dressed in a canvas garment, supporting his steps with a staff. The other friends and relations accompany him, dressed in white; and the procession is closed by a number of chairs, covered with white, in which are carried the female relations. The grief of these is very vociferous, but, at the same time, is so methodical, that it is more like art than sorrow. The body is deposited in the tomb, and here those who have attended the funeral are entertained, with a splendour proportioned to the wealth of the deceased. If he be of very high rank, many of his friends remain at the tomb upwards of a month, in apartments prepared for the purpose.

The ordinary period of mourning, for a near relation, in China, is three years, during all which time, the mourner abstains from wine and animal food. He can attend no public assembly, nor assist at any entertainment or ceremony. During a considerable time he seldom goes abroad, and when obliged to leave his own house, he is conveyed in a chair covered with white cloth. The excess of filial piety sometimes induces a son to preserve, in

his house, for three or four years, the corpse of his father; during all which time he remains near the coffin, sitting by day on a stool covered with white cloth, and sleeping by night on a mat, made of reeds.

When a native of China dies at a distance from the province in which he was born, it becomes the duty of his children to transport thither his remains, and to deposit them in the burying place of his ancestors. The neglect of this duty would entail upon the characters of his children a disgrace which would prevent them from being admitted into any honourable society. The Chinese burying-places are not permitted to be within towns; they are generally situated at a considerable distance, upon an eminence, and, if possible, in a situation so barren as to be of little use for any other purpose. The Chinese visit the tombs of their ancestors once or twice every year: they clear it of weeds, and, renewing the expressions of their grief, they place upon it wine, and other provisions, which serve as an entertainment to such as have assisted at the ceremony.

Besides visiting the tombs, they annually visit the hall of their ancestors, a large building, which is accounted the common property of every branch of the same family. The number of individuals collected in one of these halls often amounts to several thousands, among whom are persons of every situation and condition of life. In this place, however, wealth and rank entitle their possessors to no other pre-eminence than that of treating the whole family. Age is here the only circumstance universally respected; and, during this ceremony, the oldest man of the company, though he at the same time be the poorest, is accounted the most honourable. Should any of the ancestors of the family have filled a dignified office, his figure generally appears at one end of the hall. In various parts of it are inscriptions, with the names and designations of their most elevated predecessors. To have one's name placed in an honourable and conspicuous station in the hall of ancestors is the highest honour; when the name is denied admission, nothing is considered to be a greater disgrace.

General Character of the Chinese.] From what has been said in this chapter, and from the analysis, given in another chapter, of the government, law, &c. of this singular people, the reader may be led to a pretty accurate estimate of the general character of the Chinese. It may be observed, that we seldom see foreign nations either fully or fairly, and scarcely ever consider what we do see without prejudice or partiality: novelty is sure either to magnify or diminish the objects with which it is associated; and the spectator of strange manners is almost irresistibly tempted either to despise them for differing from his own, or to admire them as something very superior. This accounts for the striking differences of travellers in matters of opinion, even where the facts upon which these opinions were founded are the same. China especially, a case so strange and isolated in its nature, has furnished unbounded scope to dogmatism and speculation; and on no point could the opinions of men at one time be more opposed than on that of the character of the Chinese. Further information on the subject, however, has led to greater unanimity of sentiment regarding the people; and it is now very generally admitted that they hold a sort of bastard proximity to civilized nations, in what respects the outward forms of society, but are in real virtue and worth infinitely inferior to many communities who are styled barbarous and savage. Their general politeness and urbanity are as prepossessing as their real character is too often contemptible. Affected gravity, an excess of civility, and apparent openness, are combined in the Chinese character with pride, meanness, frivolity, grossness, and a duplicity which is almost unparalleled. An

utter disregard of truth pervades all ranks, and detection in the vilest falsehoods occasions no shame. Nothing like a feeling of self-respect or sense of honour exists among them: the bastinado seems to be their only rule of action. Although almost entirely free from the sin of drunkenness, they are guilty of the most unnatural sensualities, and make no secret of their disgusting alliances, boasting of the youth and beauty of their pipe-bearers, with the same freedom that a rake would boast of his mistress. One virtue, indeed, prevails universally among them, namely, *filial piety;* but this virtue is far from producing its usual result, of *parental affection.* The father may, and often does, punish his children with a severity that proves fatal; and, notwithstanding its being discountenanced by the penal code, it is to be feared that female infanticide prevails to a considerable extent. Parents, too, often inflict sexual mutilation on their male children; sometimes that they may stand a better chance of promotion at court, and sometimes that they may sell them as slaves. Many, also, sell their daughters to prostitution; and the number of prostitutes, from this and other causes, is in China immense. From a people capable of such things it would be in vain to expect either honourable or generous feelings; selfishness, in its meanest, most debasing, and cowardly forms, predominates over every other consideration[6]. The treatment of women is, in every country, a test of the civilization of the people; and, taking this as the standard, the Chinese must rank in the lowest scale. Every man buys his wife from her parents without seeing her; and may return her, if he do not like her appearance, upon paying a certain forfeit; he may also buy as many as he thinks he can maintain; and may sell into slavery as many as he can convict of any infidelity. Women can inherit no property. In the higher ranks, they are kept in the strictest seclusion; and among the lower ranks, all the heavy labour and drudgery falls upon them: in the fields they may often be seen, with an infant on their back, dragging the plough or the harrow, while the husband indolently directs it. Such seclusion and degradation preclude all domestic society, and cut off the sources of family affection. In short, while the Chinese, at a superficial glance, display much of the power and polish of a great and civilized nation, no kingdom could be more essentially weak or more essentially debased. Their abject submission to a despotism upheld by the sordid terrors of the lash—the imprisonment and servility of their women—the mutilation, and in many cases destruction, of their children—their unnatural vices—their unconquerable ignorance of the higher departments of science and philosophy, and dogged adherence to the little they do know of the arts—the stupid and heartless formalities which encumber their social intercourse, and their monstrous disregard of truth—the hopeless imperfection of their language—their cowardice, uncleanness, and inhumanity: these, joined to their great national conceit, and contempt for, or want of sympathy with, the other inhabitants of the earth, provoke, in the most stoical, a wish, that some mighty moral or physical convulsion would break down, or dissipate, a state of society and system of government so besotted and degrading, and that the dungeon wall, which has so long enclosed so many millions of human beings from intercourse with their fellow creatures, were for ever swept away.

Religion.] All the accounts that we possess of the religious opinions and ceremonies of the Chinese previous to the time of Confucius, are full

[6] In a case which came under Mr Barrow's observation, where a number of Chinese fell into a canal, and were drowned, no effort was made to save them, although a simple effort was all that was required.

of uncertainty, and mixed with fable. In their primitive religion they seem to have acknowledged a Supreme Being, whom they worshipped under various names, such as Tien or Kien, *heaven*, Shang-tien, *supreme heaven*, Shang-tee, *supreme Lord*, and Hoan Shang-tee *sovereign and supreme Lord*. This Supreme Being they considered as taking complete cognizance of the actions of men, and as rewarding virtue and punishing vice. We find them, however, associating with the Shangtee or Supreme Being a multitude of subordinate tutelary spirits as objects of worship, under the name of Shin or Kovey-shin. Immediately after the sacrifice offered to the Shangtee, they sacrificed also to the Shin, and to their virtuous deceased ancestors, imploring their protection and intercession with the Shangtee. The sovereign alone, who was considered as the high priest of the nation, had the privilege of sacrificing to the Tien, but any other might supply his place in making offerings to the Shin. In the earlier ages of the empire, when its boundaries were but small, one mountain was judged sufficient on which to perform these rites; but as its territories increased in size, four principal mountains in the extremities of the empire, and one in the centre, were appointed for this purpose, and denominated the five Yo, or mountains of sacrifice. To these sacred places the emperor repaired successively every year to offer sacrifice, to show himself to his people, and to reform abuses. These regular journeys, however, being found to be attended with numerous difficulties and inconveniences, an edifice was erected in the neighbourhood of the palace, as a stationary and universal Yo, and here the emperor offered the usual sacrifices, when it would have been inconvenient to remove from his palace. A similar edifice was erected about 1122 before Christ, and named Mingtang, or the temple of light. This led the way for similar temples to the sun and moon, and hence arose a multitude of superstitions; the wind, the rain, the thunder, and even diseases, &c. were, in like manner, personified, and worshipped as divinities, while emperors, warriors, &c. became demi-gods. The people forgot the more simple worship of the Shangtee, and embraced every new superstition with the greatest avidity.

Tao-tse.] The most ancient of the Chinese religious sects, is that of the Tao-tse, or sons of immortals, which was founded by Lao-tse, a philosopher, who was born about 600 years before Christ. His mother, it is believed, conceived in a retired place, by the united influence of heaven and earth, and after eighty years' pregnancy, at length, under the shade of a plum-tree, brought forth a son with hair perfectly white. It is said that Tao-tse, after having acquired a profound knowledge of the history and usages of his country, travelled into Tibet, where he imbibed the doctrines of the priests of Lama, and wrote a book entitled Tao-te-king, or the book of the power of Tao. According to his doctrine, Tao is the principle of heaven and earth, the cause of all that exists, a highly wise, but utterly incomprehensible Being. He who desires to be united to the Tao is the only wise man, and must for this end, be free from the influence of every passion, engage in no sublunary pursuit, keep silence, censure nothing that exists, and be kind to his fellow men. The principles of this sect are merely a modification of Boodhism.

His followers, named Tao-tse, therefore, place the supreme duty and felicity of man in a state of perfect tranquillity, recommending the suppression of all violent desires and passions, the utmost moderation in every pursuit and enjoyment, and an utter indifference with regard to the past, the present, or the future. But as this apathy, or tranquillity, which their

master inculcated, and which they laboured to attain, was necessarily disturbed by the prospect of death, they adopted a notion, which they are supposed to have derived from the idea of the soul of the Lama passing into the person of his successor, and imagined, that a liquor might be compounded from the three kingdoms of nature, which would possess the virtue of renovating the vigour of the human body, and of rendering it finally immortal. In pursuit of this beverage of immortality, they addicted themselves to the study of alchymy, which they mixed up with various magical practices, tricks of divination, and other superstitious absurdities. The hope of avoiding death drew to them a multitude of followers, especially among the more opulent classes; and several of the emperors abandoned themselves entirely to their opinions and practices. Their tenets made the most rapid progress throughout the empire; and the court was filled with the teachers of the system, who received the title of Tien-tse, or "celestial doctors," while their chief was honoured with the dignity of a grand mandarin, which his successors are said still to retain, residing in a splendid palace in the province of Kiang-see, to which multitudes of worshippers continually resort. These draughts of immortality, sought after with so much avidity, were not unfrequently rendered instrumental in cutting off the sovereigns and grandees of the empire, by administering a poisonous dose in their place; and even in their most genuine state, they are supposed to have, in many instances, brought on a premature decease. This beverage of life, which is still held in great request, especially among the higher classes of the Chinese, is understood to be a compound of opium and other stimulating drugs, which excites the system and exhilarates the spirits for a moment; but, by the frequent repetition of the dose, which the langour by which it is succeeded renders necessary, the constitution is at length exhausted, and the period of life is thus abbreviated, rather than prolonged, by this pernicious superstition; nevertheless the sect of the Tao-tse continued to increase in power and numbers, under the protection of princes, the countenance of the great, and the credulity of the people; and has preserved its extensive influence even to this day, in spite even of all the attempts of the celebrated Confucius to introduce more enlightened doctrines.

Confucius.] Confucius or Kong-foo-tse[7] is regarded by the Chinese as

[7] Confucius is the name by which the great Chinese philosopher is known in Europe; and although his life, as recorded by his countrymen, is in all likelihood little better than a romance, it may be proper to notice its prominent traits. It appears that he was born at Chang Ping about the year B.C. 550. He lost his father when he was three years old, and was committed to the care of his grandfather, whose grave and serious deportment, we are told, he endeavoured to imitate in all things! It is recorded to his honour, that he took no delight in the amusements and games of childhood—a circumstance which we should rather consider as a bad symptom of the vigour of his intellectual or physical faculties. He married at the age of nineteen, and by his wife had one son, whose reputed descendants form a sort of nobility in China, and are exempted from taxes. Confucius soon divorced his wife, for no other reason than that he might attend the better to his studies, and put in practice the grand scheme which he had conceived for the reformation of philosophy. The reputation acquired by his learning and virtues procured for him many eminent situations in the magistracy, al of which he discharged with honour to himself and benefit to his country. His disciples were numerous, and the following was his order of instruction: 1. The study of the moral virtues; 2. That of the arts of reasoning and eloquence; 3. The study of th rules of government, and the duties of the magistracy; and 4. The delivery of discourses on moral subjects. His great exertions at length injured his health, and he fell into a lethargy from which he did not recover, but died in the 73d year of his age. Of his works some notice will be given under the head *Language and Literature*. Without entering into any account of the philosophy of this celebrated man, it is evident that he must have made some powerful appeals to some of the best principles of human nature, or he neither could have acquired or retained so strong a hold on the affection and admiration of so many millions of men.

the chief of their wise men, and as the author of their whole civil constitution. He endeavoured to restore the ancient system, and to improve the conduct of his countrymen, by exhorting them to obey the commands of heaven, to love their neighbours, and to restrain their passions. Some of his philosophical principles are, that out of nothing there cannot any thing be produced; that material bodies must have existed from all eternity; that the cause or principle of things must have had a co-existence with the things themselves; that this cause, therefore, must also be eternal, infinite, and indestructible; and that the central point of influence, from which this cause chiefly acts, is the blue firmament (tien), whence its emanations are spread over the universe; but neither he nor his disciples ascribe to the Deity any personal existence, or represent the First Cause under any distinct image; while the sun, moon, stars, and elements, are considered also as composing the firmament, or Teen, as the immediate agents of the Deity, and as the productive powers in creation. The universe, in short, according to this philosopher, is one animated system, made up of one material substance, and of one spiritual being, of which every living thing is an emanation, and to which, when separated by death from its particular material part, every living thing again returns; hence the term death is never used by his followers, but they say of a person, at his decease, that he has returned to his family. Thus he taught, that the human body is composed of two principles, the one light, invisible, and ascending, the other gross, palpable, and descending; that the separation of these two principles causes the death of human beings; and that, at this period, the light and spiritual part ascends into the air, while the gross and corporeal matter sinks into the earth. With these tenets was naturally connected a belief of good and evil genii, and of tutelary spirits presiding over families, towns, mountains, and other places; and while the system of Confucius was little better than atheism in the mind of the philosopher, it became a source of gross idolatry among the people, who could not comprehend the more refined notions, but, needing some palpable object upon which to fix their attention, represented the tutelary spirits by images, and worshipped them by sacrifices. Confucius himself was much addicted to a species of divination or fortunetelling, and says expressly in one of his works, that the wise man ought to know future events before they happen, and that this may be done by means of lots. His tenets, in short, instead of overcoming the old errors, gave rise to new superstitions; and the chief difference between the proper followers of Confucius and those of Lao-tse, is this, that the former inculcate the duty of living among men, and endeavouring to improve them, and the latter avoid every kind of society and occupation, and lead a frugal retired life, as their only felicity.

Fo.] During the reign of the emperor Ming-tee, of the Han dynasty, A.D. 63—81, a new superstition was introduced into China, whose influence is perhaps still more extensive and pernicious in that country, than any of these by which it was preceded. One of the Tao-tse doctors had promised to a brother of the emperor's, that he would open to him a communication with the spirits; and this superstitious prince having heard of a spirit in Tien-tso, or Hindostan, named Fo, or Foe, prevailed upon the emperor, by his importunities, to send an embassy for this foreign divinity. When the officer, who was entrusted with this mission, arrived at the place of his destination, he found only two Buddhists, or priests of Fo, whom he carried to China, with some of their canonical books, and several images of the idol painted on linen. The followers of Fo describe him as the son

of a prince of one of the kingdoms of India, near the line; and affirm, that as soon as he was born he stood upright, walked seven steps without assistance, and, pointing to the heavens with one hand, and to the earth with the other, cried aloud, "In the heavens and the earth there is no one but myself who deserves to be honoured." At the age of seventeen, he married three wives, by one of whom he had a son, named by the Chinese Mo-heoolo; but at the age of nineteen, he abandoned his house and family, with all the cares of life, and committed himself to the care of four philosophers, with whom he retired to a vast desert. Being filled with the divinity at the age of thirty, he was metamorphosed into the Fo, or Pagod, as the Indians term it, and immediately thought of establishing his doctrines by miracles, which attracted numerous disciples, and spread his fame over every part of India. When he had attained his seventy-ninth year, and perceived from his infirmities that his borrowed divinity could not exempt him from mortality, he is said to have called his disciples together, and to have declared to them, that hitherto he had spoken to them by figurative expressions, but that now he would discover his real sentiments, and unveil the whole mystery of his wisdom, namely, that there is no other principle of things but a vacuum, or nothing: that from this nothing all things at first sprung; that to nothing they shall again return; and that thus ends all our hopes and fears at once. After his decease, a multitude of fables were propagated concerning him by his followers, such as, that he was still alive, and had been born 8000 times, appearing successively under the figure of an ape, a lion, a dragon, an elephant, &c. His last words excited much dissension among his disciples, some of them resolving to adhere to his original tenets, others adopting his concluding atheistical view of things, and a third class attempting to reconcile both systems together, by making a distinction between the external and internal doctrine. The internal doctrine, to which the disciples of the idol are exhorted to aspire, is a system of the most absurd atheism; of which some of the principal tenets are, that nothing is the beginning and the end of all things; that all beings are the same, differing only in figure and qualities; that the supreme happiness of man consists in acquiring a resemblance to this principle of nothing, in accustoming himself to do nothing, to will nothing, to feel nothing, to desire nothing; that the sum of virtue and happiness is to be found in indolence and immobility, in the cessation of bodily motion, the suspension of all mental faculties, the obliteration of all feelings and desires; that when men have attained this divine insensibility, they have nothing to do with virtue or vice, rewards or punishments, providence or immortality, no changes, transmigrations, or futurities to fear, but have ceased to exist, and become perfectly like the god Fo. This state of annihilation is completely identical with the Nerawana of the Ceylonese Boodhists, with the Nigban of the Burman Boodhists, and the Neereupan of the Siamese Boodhists, and those of Laos. The external doctrine has the greatest number of followers. It teaches a great distinction between good and evil, and a state of rewards for the good, and of punishment for the wicked after death, in places suited to the spirits of each. It acknowledges the transmigration of the soul through different bodies, till it is at length completely purified and prepared for annihilation, which, with the Boodhists, is the perfection of bliss. It affirms, that the god Fo came upon this earth to expiate men's sins, and to secure them a happy regeneration in the life to come. Its practical injunctions are simply these: To pray to the god Fo, and to provide his priests with temples and other necessaries, that by their

penances and supplications they may procure for his worshippers the forgiveness of their sins; and to observe five precepts, viz. to kill no living creature,—to take nothing that belongs to another,—to commit no act of impurity,—to utter no falsehood,—and to drink no wine. The practice of these duties is enforced by threatenings of future punishment, especially of transmigration into the bodies of dogs, horses, rats, serpents, &c. The number of temples dedicated to Fo is altogether incalculable, and they exhibit great variety, in respect of sacredness, magnificence, &c. They are open night and day for the reception of the votaries of the god, before whose image is placed a table furnished with flowers and perfumes; he is also accommodated with a fire fed constantly with odoriferous wood. They also contain images of birds, beasts, and creeping things, to symbolize the various transmigrations of this supposed deity. It need hardly be added that *Fo* is the Buddha of the Hindoos.

None of these different systems can be said to be the prevailing creed in China; or, what is more remarkable, can be found pure and distinct from the rest. The greater part of the Chinese have no decided opinion on the subject, and are either complete atheists, or, if they acknowledge a Supreme Being, utterly ignorant in what view he ought to be regarded; while they all combine with their peculiar sentiments the multifarious superstitions of the more popular sects. Of all these tolerated and established religious persuasions, the emperor is the supreme head: without whose permission not one of them can enjoy a single privilege or point of pre-eminence; and who can diminish or increase, at his pleasure, the number of their respective temples and priests.

The existing worship of China, then, is a confused mixture of superstitions, of which individuals receive and observe just as much as they please; and those parts of it, which the government seem to uphold, may be viewed rather as political than religious institutions. The emperors reserve to themselves the privilege of adoring the Tien, but they equally sacrifice to the spirit of the earth, the sun, or the moon, and attach themselves more or less to the notions of the Tao-tse or of Fo. While the reigning Tartar family acknowledge more particularly the faith of the Grand Lama, they nevertheless perform the established sacred rites of their predecessors, and repair to the festivals which the kalendar prescribes. And, while the literati study the doctrine of the Tien, they are as superstitious as unbelieving, and are found with others in the temples praying to the idols.

There is only one temple consecrated to the Tien in the whole empire, called Tien-tan, or the eminence of heaven, and it is situated in the Chinese division of the city of Pekin, where the emperor offers a sacrifice at the winter solstice, consisting of oxen, hogs, goats, and sheep. The Tee-tan, or eminence of the earth, is also situated in the Chinese city, and is covered with green tiles; where the emperor, in like manner, sacrifices to the earth at the summer solstice. On the Ge-tan, the altar of the sun, he sacrifices at the vernal equinox; and on the Yue-tan, the altar of the moon, he sacrifices at the autumnal equinox. These rites are performed with the greatest solemnity, the tribunals and every public office are shut, and business of every kind suspended.

Besides the temples to Fo, whose immense numbers we have already noticed, numerous small chapels are to be seen in the country and villages, dedicated to the different spirits that preside over the land, the water, the mountains, &c. The dragon is held to preside over the air and the moun-

tains, his figure is one of the imperial insignia, and the emperor alone has the privilege of wearing a dragon with five claws embroidered on his robes. The temples contain a vast number of different idols, some of which are of a colossal size, and these are generally placed at the entrance. They represent various genii, or guardian spirits, whose respective attributes are expressed by certain emblems. Some of these are 30, 50, 60, and even 80 feet in height: some of them with four heads, and a multitude of hands and arms. The divinities in the interior of the temples are of smaller proportions, and in various postures; some with the heads of animals, others with horns on their foreheads; some reclining, others sitting cross-legged upon flowers or cars; but all are represented as very corpulent, which the Chinese regard as a very honourable quality. In short, they have divinities of all possible shapes, and so numerous, that some of the temples contain five hundred of them.

Besides those places of public resort, the Chinese have always an altar in their private dwellings, and a few small idols, before which they burn gilded papers, especially at the new and full moon; and there is generally placed upon their door the name or figure of the idol Men-shin, who is a kind of household god, and who is represented with a club in one hand, and a key in the other.

The priests, officiating in these different temples, are either the followers of Tao-tse, or of Fo, the latter of whom are called Ho-shang; but both are generally denominated by the name of Bonzes; and indeed they resemble each other so nearly in their appearance and functions, that they are scarcely distinguishable. The bonzes of Tao-tse are generally devoted to celibacy, and associated in convents like the Romish monks. They wear a long robe, with large sleeves, and without a neck. They never shave their heads, but collect their hair upon the crown. In performing their worship, they move in procession round the altar, on which the sacred flame is kept burning, chaunting in recitative, and bowing their bodies as they come in front of the altar, while gongs and musical plates are sounded at certain intervals. In their dresses, altars, images, incense, bells, candles, chaunting, &c. they bear a striking resemblance to the Catholic exhibitions; and one of the missionaries, much hurt at the similarity, makes the following observations on the subject; " There is no country where the devil has so successfully counterfeited the true worship of the Holy Church. These priests of the infernal spirit wear long loose gowns, exactly resembling those of some of the fathers; they live in temples, like so many monasteries; and chaunt in the same manner with us." They sacrifice to their idols a hog, a fowl, and a fish; and then observe a multitude of ceremonies, incantations, mystical rites, and magical practices, which frequently vary according to the fancy or skill of the actors. They act also the part of fortunetellers, in which they are sufficiently expert, representing the figure of their chief in the air, causing the pencil to write the oracular responses of itself, showing the figures of persons in a basin of water, &c. They attend at funerals, to drive away evil spirits; profess to cure the sick by their incantations or intercessions; and pronounce a benediction upon the ships, when first launched into the sea. They run about the streets lashing themselves, as an expiation for the sins of their votaries, and collecting money as the price of their services. The priests of Fo live in a state of celibacy, and in large convents, which the Chinese call Poo-ta-la, which is the mode in which they pronounce the word Boodha-alaya, that is, the habitation of Buddha.

The bonzes are generally regarded with contempt, as persons who deprive their country of that personal labour, which is counted in China as a sacred duty; and it is only persons advanced in life, or of the lowest class of people, who join in their society. Hence it is their practice to purchase young children to learn and to perpetuate their system; and to attract the greater respect and confidence, they employ every possible mode of acquiring riches, and securing reverence. When consulted with respect to the most fortunate spot for building a house or erecting a sepulchre, they have generally a secret understanding with the proprietor of the ground, which they pronounce to be the most desirable, and share with him the price of the purchase. To secure the protection of the emperor or chief mandarins, they place them among the number of their divinities; and to draw the populace to their temples, they announce prodigies of various kinds, and threaten dreadful transmigrations to those who neglect to bring offerings, and to secure the benefit of their prayers. In these offerings, animal victims are now rarely seen, on account of the great scarcity of sheep and the value of hogs; but fruits and roasted fowls are the principal gifts. Even these, however, are seldom left for the idol or the priests, but are carried away by the worshipper, after the invocation has been performed; and, in their stead, a sum of money is given to the bonzes of the temple. In these acts of devotion, it has been remarked that the Chinese appear to be actuated rather by a dread of some evil in this life, than the fear of punishment in another; that they perform their sacred rites more with a view to appease an angry deity, and to avert impending calamities, than from any hope of obtaining a positive good; that they rather consult or inquire of their gods what may happen, than petition them to accomplish or avert it; that a Chinese can scarcely be said to pray, but while he may be grateful when the event proves favourable, is petulant and peevish when it is adverse. They hold the different idols in more or less estimation, according to the favours which they are supposed to have conferred upon their votaries; and when, after repeated applications, their suit is not granted, they abandon the spirit of that temple as a god without power, or perhaps pull down the edifice, and leave the statues exposed in the open air. Numbers of temples are thus seen in ruins, their bells lying on the ground, their monstrous idols standing unsheltered, and their bonzes wandering in quest of alms or a more fortunate asylum. Sometimes the fallen deity is treated with the utmost outrage and contempt. "Thou dog of a spirit," the enraged votaries will say, "we lodge thee in a commodious temple; thou art well gilt, well fed, and receivest abundance of incense; and yet, after all the care bestowed upon thee, thou art ungrateful enough to refuse us necessary things!" Then, tying the idol with cords, they drag it through the kennels, and bespatter it with filth. But should they happen, during this scene of vengeance, to obtain, or to fancy that they have obtained, their object, then they carry back the insulted divinity to its place with great ceremony, wash it with care, prostrate themselves before it, acknowledge their rashness, supplicate forgiveness, and promise to gild it again, upon condition that what is past be forgotten. Sometimes those, who have found all their gifts and worship unavailing, have brought the idol and its bonzes to a solemn trial before the mandarins, and procured the divinity to be dismissed as useless, and its priests to be punished as impostors.

Every trouble in China is attributed to the influence of some evil spirit, which every one's imagination frames to himself, and which he places,

as it pleases him, in an idol, an old oak, a lofty mountain, or at the bottom of the sea. These mischievous spirits are considered by some as the souls or purified aerial substances of animals, such as of foxes, apes, frogs, &c.; and these creatures are supposed to have the power, after living a certain number of years, to divest themselves of the grosser parts of their nature, and, after becoming pure essences, to take delight in tormenting human beings, especially by exposing them to diseases. Hence, in time of sickness, the principal remedy is to send for the bonzes, to banish, by their noises and incantations, those malignant spirits.

In every possible circumstance of life, the Chinese implore the protection and aid of some deity. Should a countryman be about to raise some large stone, or to attempt any work in which he might be in danger of receiving some injury, he places a small stone upright, surrounds it with two or three candles, burns two or three gilded papers, and then applies to his labour with perfect confidence. When they have any dread of losing their children, they consecrate them to some divinity; and, in this view, they pierce the ear of the child, and suspend from it a small plate of copper, silver, or gold, with the name of the tutelary spirit inscribed upon it; or they simply tie the hair of the head on each side into the form of a small tuft, which indicates that they are devoted to some god, who will preserve them from accident and misfortune. They pay great regard to lucky and unlucky days; and the government even publishes an annual kalendar, in which, among other matters, the favourable moments in that season are properly marked. Midnight is always a lucky point of time, because in their opinion the world was created at that hour. But, of all their superstitions, the two following are the most prevalent, and form the chief object in their various acts of worship in the temples. 1. The calculation of their destiny, which they call Sooan-ming, and which is generally done by blind musicians, who go from house to house, playing on some musical instrument, and offering their services for a little money: whose art consists chiefly in astonishing their hearers by speaking learnedly of the position and influence of the stars, and in describing the proper idol to whom sacrifices must be offered, or the bonze whose prayers must be secured. 2. The securing a good influence, and fortunate exposure, in building their habitations or sepulchres, which is called Fong-shooy, or 'wind and water.' Upon this depends every one's success and happiness in life; his natural abilities and genius, his advancement to honours, his commercial prosperity, good health, a numerous family, are all ascribed to his house or his burying-place having a happy situation, and his thus possessing a lucky Fong-shooy. They are constantly employed in devising means to render this circumstance or influence favourable. Much depends upon having the doors of their habitations placed under the protection of a proper spirit, arranged in a proper order, or constructed in a proper form. A round door is fortunate, and there is generally one at least in every Chinese dwelling. It is bad to have two doors directly opposite to each other, as the evil spirit in that case more easily enters. When this cannot be avoided, they put up screens of wood to stop the genius in his progress, or form their doors in the shape of a fan, a flower, a leaf, which all contribute to bewilder the malignant spirits, and to make them afraid to leap over. Should a neighbour build a house close to another, but not upon the same plan, or should there be any corner or slanting of the roof, so placed as to cross that of the other, this is enough to occasion desolation and distress to the proprietor, who lives in constant apprehension of

some malignant influence. Should a lawsuit fail to relieve him from the adverse encroachment, his only resource is to raise on the middle of his roof an enormous figure of a dragon, in baked earth, darting a furious look upon the fatal angle, and opening its mouth so as to swallow the offending object: this removes all apprehension, and restores the tranquillity of the household.

Christians.] During the seventh century, about the year 635, a few Christians of the Nestorian sect passed from India to China, and were tolerated by the government nearly two centuries, under the designation of priests of Ta-tsin. But in the year 815 they were proscribed by the emperor Voo-tsong, at the instigation of some of his favourite bonzes; and, after suffering a severe persecution, appear to have been completely extirpated. In the beginning of the 13th century, a number of Christians of the Greek church, who had followed the army of Genghis-Khan, entered China along with the Tartars under Kublai-Khan, and received from that emperor a grant of a space of ground within the walls of Pekin, for the purpose of erecting a church. Marco Polo, the celebrated Italian traveller, who visited China about this period, accompanied three missionaries of the Dominican order, who were sent from Venice to Pekin, at the express desire of Kublai-Khan; but, whether from a want of encouragement or of zeal, they returned in a short time to their native country with no small degree of wealth, acquired chiefly by trading in their progress through the East. About the middle of the 16th century, Francis Xavier, at the head of a company of Romish missionaries of the order of Jesuits, reached the island of San-Shian on the coast of China, where he died in 1552; and, after a communication was opened with India by the cape of Good Hope, a number of Romish priests passed into China to propagate the faith. In this view they took care, in the first instance, to render themselves useful to the government as interpreters, astronomers, mathematicians, and mechanics, and in general found means to acquire wealth and respectability. The Portuguese, particularly, who hold the highest stations in Pekin, are in possession of good estates and country seats; and the Jesuits, before the dissolution of their society, were a very rich and powerful body in China. These missionaries, however, especially the Portuguese, are said to be extremely jealous and illiberal towards each other; and it was in a great measure owing to their frequent dissensions, that the Christians in China have been so severely persecuted. The most inveterate of these contests took place between the Jesuits and the Dominicans; the former of whom, by assimilating their opinions and practices in a great degree to these of the Chinese sects, and by professing that they came only to restore the ancient religion of the country to its original purity, when first delivered by their great philosopher Confucius, began to gain immense numbers of followers, who were half Christian and half Pagan in their sentiments and manners. The Dominicans, upon their arrival in the country, at once condemned these compromising arts, excluded these mixed proselytes from the number of Christian converts, and prohibited their followers among the natives from observing any of their ancient rites, especially from practising that fundamental national duty of sacrificing to their deceased relatives in the hall of Ancestors. The Franciscans adopted the sentiments of the Dominicans; and represented the conduct of the Jesuits to the Pope in such a point of view, that he sent out a bull to China, forbidding all the Catholic missionaries to permit the union of any idolatrous ceremonies with those

of the church. But the Jesuits, whose superior talents and useful services had secured the protection and favour of the reigning sovereign, *Kang-hee*, treated the injunctions of the pontiff with contempt, and continued to make converts according to their own plan. They obtained a grant of land from the emperor for the purpose of building a church at Pekin; and received a dispensation from the succeeding pope in favour of their proceedings in the conversion of the Chinese. Representations from the Dominicans and Franciscans were again transmitted to Rome, representing the Jesuits as the greatest enemies to the Christian faith; and these were followed by contra-remonstrances on the part of the Jesuits, with an attestation from the emperor himself, bearing, that the ceremony of paying homage to the dead, as practised by the Chinese Christians, was not of a religious but of a civil nature, and a duty which the political constitutions of the empire rendered indispensable.

These disputes were at length carried so far, and the mandates of the pope requiring the Chinese converts to desert those ceremonies which the government regarded as an essential law of the country, became so threatening and imperious, that the emperor at last conceived his authority to be attacked, and interdicted the Christian faith from being taught in his dominions. His son and successor, Yong-tching, began his reign with imprisoning and banishing the missionaries. He permitted only a few, whose assistance was needed in regulating the kalendar, to remain in the metropolis: their converts he put to death in great numbers. In spite of these persecutions, which have been renewed in every reign, and which particularly prevailed in the year 1785, numbers of new missionaries are occasionally making their way into the country; and two young men, under that character, requested and received permission to join Lord Macartney's embassy, and to proceed with him to Pekin. There are two kinds of missions in China; one which is approved by the government, and resides at Pekin, and which the Chinese now find essentially necessary in transacting many of their most important public affairs; and another in the empire at large, which the government does not avow, but which the mandarins are sometimes backward to detect, lest they should be punished for not having been sufficiently watchful to prevent the first entrance of the missionaries into the country, and are therefore not always very much disposed to question any one publicly concerning his faith. By letters received from Canton in 1802, it appeared that the prohibitions against the Christians had been greatly relaxed; and that the emperor had actually issued an edict permitting the residence of the Roman catholic missionaries in any part of his dominions, within 20 miles of the court; in consequence of which indulgence, it was added, that a number of converts had been baptized. It appears, however, from a subsequent edict, dated 1805, that the labours of some of those missionaries had excited the alarm of the government; and that a persecution was then carrying on against the Christians. The edict admits the right of Europeans, settled in the country, to practise their own religious usages; but declares it to be an established law of the empire, that they should not propagate their doctrines among the natives. A missionary residing at Pekin, and named Odeadato, who had made many converts, and also printed several religious tracts in the Chinese language, was banished for life to Gehol in Tartary; and a number of the Chinese, who had become Christians under his instructions, or been assisting to him in his plans, were condemned to suffer punishment, according to their respective degrees of guilt. It was further declared,

that all who shall hereafter frequent the houses of Europeans, in order to learn their doctrines, will be punished with the utmost rigour of the law. One of the crimes imputed to Odeadato was a transmission of a map of China, and several letters, to a Chinese convert, a native of Canton, and his having printed 31 tracts on the Christian religion, in the Chinese character, and privately dispersed them throughout the empire. Subsequently to this edict, several attempts have been made to crush Christianity in China. In 1815, the viceroy of Sechwen represented to the emperor the growth of the depraved and irregular religion of the West, and specifies the seizure of persons and books, and the measures he took to force a recantation on the part of the accused. Many of them refused to recant. The emperor on this occasion ordered such as persisted in the Christian religion to be strangled; some, including women, were banished to Tartary, and the rest were ordered to wear the *cangue* for ever. In 1817, a furious persecution took place at Pekin, some hundreds of Christians were cruelly tortured; several abandoned the faith, and many sacrificed their property, and deserted their families and Pekin for the rest of their lives. In 1822, a conspiracy, formed by a secret revolutionary society, called the Triad, against the present emperor, being detected, occasion was taken from this to implicate and oppress the Christians; they were subjected to exactions, some were banished, but none suffered death. The number of Christians scattered throughout China is calculated by Sir George Staunton at 160,000. By a statement in a Romish journal, from a missionary bishop in China, the number of Chinese converts in Sechwen in 1821, is made 46,287. Previous to this, in 1811, the number was upwards of 60,000. Two Chinese versions of the Holy Scriptures have been completed; one by Dr Marshman at Serampore, and another by Dr Morrison, both of which have been approved by Mr Remusat, as faithful and accurate versions. By the latest accounts, only three Portuguese missionaries remained at Pekin, bishop Pia and fathers Ribeira and Haon. Their congregation consists of Chinese monks. The Russians have a mission attached to the suite of their charge d'affaires at Pekin, consisting of eight persons including the Archimandrite. It is intended to perform divine service in future in the Chinese language, and one of the Russians is at present, or was very lately, employed in translating the principles of the Christian faith (Greek church) into the Chinese language. The students of the mission are carefully studying the Chinese and Mandshoor tongues. Above 50 of Æsop's fables have been translated into the former language.

Some of the Christian associations in Great Britain have recently turned their attention to the practicability of sending the sacred scriptures to the Chinese. In 1802, a note was sent by the archbishop of Canterbury to "the Society for promoting Christian Knowledge," accompanied with a copy of a memoir by the Rev. W. Mosely, "on the importance and practicability of printing the sacred scriptures in the Chinese language, and circulating them in that vast empire;" and, upon a motion by the bishop of Durham, the matter was referred to the East India mission committee. The same idea had occurred to the British and Foreign Bible Society; and a young Chinese then residing in London, named Yong Saamtak, had been employed by them in transcribing a Chinese translation of a harmony of the gospels, and most of the epistles, which had been found in the British museum; but it was discovered, upon examination, to have been made from the Vulgate, probably by some Jesuit, and the work was abandoned. This great object has since been undertaken, and in a great measure accom-

plished, by the Baptist missionaries in Bengal, with the assistance of a learned Chinese; whose important labours were noticed with just commendation by the governor-general in India, in the following impressive language: " I must not omit to commend the zealous and persevering labours of Mr Lassar, and of those learned and pious persons associated with him, who have accomplished for the future benefit, we may hope, of that immense and populous region, Chinese versions, in the Chinese character, of the gospels of Matthew, Mark, and Luke; throwing open that precious mine, with all its religious and moral treasures, to the largest associated population in the world." A similar attempt is making also by a Mr Morrison at Canton, who was sent to that station by the London missionary society.

The Jews are not numerous in China. They reside chiefly in the silk provinces, and are the best manufacturers of that article. They are called by the Chinese, Hoey, or Lang-mao-hoey, that is, Hoey with the blue bonnets, because they wear a species of turban of that colour, when they assemble in their synagogues.

There are not above 6,000 families of Mahommedans in all China, who live in a dispersed state in the different provinces. They are as little considerable for wealth or rank, as number, being generally mechanics or husbandmen. They live peaceably, without interfering with the religious opinions of the country, or endeavouring to propagate their own doctrines by missionaries or intermarriages with the Chinese.

Language and Literature.] The spoken language of the Chinese is composed of monosyllables; and these are not numerous; but their meanings are totally changed by differences of pronunciation. Thus the word *tchu*, pronounced by lengthening the *u*, and with a clear tone of voice, signifies *master* or *lord:* if it is pronounced in a uniform tone by lengthening the *u*, it signifies *hog;* when pronounced lightly and with rapidity, it signifies *kitchen;* and when articulated with a strong voice, depressed towards the end, it signifies a *pillar.* In this way the word *po* is made to signify *glass, to boil, to winnow rice, wise or liberal, to prepare, an old woman, to break or cleave, inclined, a very little, to water, a slave or captive*, and perhaps many other ideas equally heterogeneous.—The tones and inflections are so minutely varied by the Chinese as to escape the ears of most Europeans, although some have spoken Chinese so well as to deceive even the natives. An instance of this occurred some years ago at Canton, which may be mentioned, as it illustrates the inveterate national conceit of the Chinese. An English gentleman, long resident at Canton, one day inquired of a blind beggar the history of his misfortunes. The beggar, hearing his own language, conceived he was addressed by a countryman, and began his " pitiful story," but was stopped in the midst by some one reproaching him for conversing with a *Saï-kwaï* (or European); upon which the miserable creature changed his whine into a burst of indignation at the presumption of any one, not a native, daring to use the language of the " Celestial Empire." In the Chinese there are four different languages: the *Kou-ouen*, or classical language; the *Ouen-tchang*, or high style of composition; the *Kouan-ha*, or language of the court; and the *Hing-tan*, or provincial language. The oral dialects of China are very numerous, and the inhabitants of neighbouring provinces are frequently unable to understand one another. Even among the natives of one province various contrivances are employed to obviate the necessary ambiguity of the language. Excessive gestures, and contortions of the features, are continually called

into action. The vocal tongue of China is diametrically opposed to most others. The number of sounds distinguishable by the English alphabet, is about 350; and, if we divide the number of characters, 80,000, by this, we shall find that, upon an average, the same sound, or sounds so similar as not to be discriminated by means of our alphabet, must be applied to about 229 different and discordant ideas. The most experienced Chinése will find one hundred (or perhaps one thousand) characters expressed by the same identical sound. We cannot be surprised to find, therefore, that since the meaning of the vocal language is so imperfectly transmitted to the mind by means of the tongue and ear, the Chinese are forced, in common conversation, to trace the characters rapidly in the air, in order to assist the apprehension of the person addressed; or that, in public assemblies, passages of an orator's speech, or of an imperial edict, are inscribed on boards and exhibited to the eye, while their sounds are uttered to the ear of the multitude. This expedient is not only convenient as the means of preventing very awkward mistakes, but it is a very advantageous mode of communicating a language so constructed that it sometimes requires several phrases to express, with adequate force, what is conveyed by the sight of a single character.

As the Chinese language consists of a string of monosyllables, its grammar differs vastly from that of other languages. All the words are indeclinable; and nothing is known of the distinctions of gender, number, case, mode, tense, or person. An invariable order of words is the principal expedient by which this defect is remedied. The subject, verb, and immediate object, must always follow each other in succession; a dependent term always precedes that on which it depends; and a conditional sentence before that to which it is annexed. On these principles all the construction of the language rests. There is, however, a considerable difference between the ancient style, used by Confucius, Mencius, &c. and the learned language of the present day. The Chinese, it is well known, regard women as inferior in the scale of creation; this feeling, at once the cause and the symptom of an ill-organized society, may be discovered in the mode in which they employ the character *neu*, signifying the woman, in composition. *Suh*, discreet, and respectful, is compounded of *woman* and *restriction*. *Foo*, a married woman, of *woman* and *broom*. *Tho*, subjected, secure; of a *claw* placed over *woman*. *Wang*, immoral, consists of *fugitive* and *woman*. The same character is employed in the following compounds: *Nan*, to wrangle or scold, composed of two characters of *woman* placed *opposite to each other*. *Neaou*, levity of behaviour, lewdness; of a *man* placed between *two women*; and, *vice versa*, a *woman* placed between *two men*. *Chen*, beautiful, elegant; of *woman* and a *single garment*. *Seu*, weak, feeble; of *a woman* and *want*. *T'han*, to be in a disordered dirty state; of *woman* and *coals*. *Seun*, conceited; of *a woman* and *to strut*. *He*, to play or frolic; of *a woman* and *pleased*. *Shwang*, a widow; of *woman* and *hoar frost*. *Thuh*, gross lewdness; of *woman* and *a muddy ditch*. *Tsue*, to marry; of *to take* and *woman*. *Gan*, suppressed anger; of *woman* and *sour wine!*—The following are examples of elegance in the use of this key: *Ca'ha*, a young unmarried woman, composed of *woman* and *bending down* like an ear of corn. *Ying*, an infant at the breast; of *two pearls* and *woman*. *Hoo*, handsome, pretty; of *woman* and *to sigh*.

The Chinese mode of writing has been compared, without much propriety, to the Egyptian hieroglyphics. "If all the fundamental or generally necessary ideas are arranged in a certain order; if under these

generating ideas all those others are classed which are furnished by common language, or which occur to the judgment of the contriver; if each of the leading ideas has a representative sign; if this sign is arbitrary, rude, and whimsical; if these signs, elevated to the rank of the true keys of the language, are made the constant basis of signs equally abstract and arbitrary, to denote the subordinate idea; this system will give us a perfect picture of the learned language of China. Its keys, 214 in number, and its derivative signs, amounting to 80,000, do not express words, but ideas; they are addressed solely to the eye and the memory; they never excite the imagination, and not a hundredth part of them have any corresponding vocal expression. The beauty of a Chinese poem consists in not admitting of being read aloud; and the eminent literati of that country conduct their disputes by describing in the air, with their fans, characters which do not correspond to any word in the language which they speak."[3]

Could we imagine that a nation existed the individuals of which did not possess the faculty of speech, and were able to convey ideas to each other by a medium adapted to the eye alone, their language (if such a solecism may be pardoned) would be constructed upon the same principles as the Chinese character; it would, in fact, correspond exactly with that character in its origin and subsequent history, as developed by Chinese writers, who state that their symbols were originally representatives of the object signified, which, for the sake of convenience, and to admit of ready combination in forming signs of abstract ideas, were abbreviated and modified; and that many characters still show that the source from whence they were derived was a resemblance to the object.

As the characters express the idea without any relation to the sound, they can only be arranged in classes, derived from some peculiarity in their form common to a large number; if the characters are compound, all which have one common element may be placed together; and the Chinese grammarians, by adopting this plan, have contrived to arrange the 40,000 words, of which their language is composed, in such a manner as to render it easy to consult their dictionaries when once the radical character is known. In the best lexicons the number of these radicals amounts to 214; and, when once the difficulty of ascertaining them has been surmounted, the written language may be easily acquired. But as the characters have no sound, a knowledge of the written language does not secure any knowledge of the oral. This must also be studied before the learner could hold a personal intercourse with the Chinese.

Such is the shackling nature of the language, that it would be preposterous to expect any high attainments in literature, although literature is fostered by government, and an eminence in it almost the only passport to official situations. In composition, the chief beauty consists, not so much in the novelty or importance of the meaning which is conveyed, as in the choice of the characters or groups of metaphors which are employed to suggest it. When translated into another language, these metaphors are necessarily dropped; and a passage, which delighted the eye of a learned Chinese, from the variety of pleasing and suitable images which the compound characters suggested to him, appears, when the naked meaning is stated in words, to be ridiculously obvious and trifling. Poetry is a very general study among the Chinese; and the late emperor *Kien Long* was considered

[3] Malte Brun

to be a proficient in the art.[9] The books most in esteem in China are those attributed to Confucius. These are the Five *King* or 'Doctrines;' the *Ta Hio*, or 'Grand Science;' the *Chong Yong*, or 'Unchanging Medium;' the *Yun Lu*, or 'Book of Maxims;' the *Hiao King*, or 'Filial Reverence;' the *Sias Hio*, or 'School of Children;' and an historical work, called the *Chun-Tsieu*. There is a gazette published at Pe-king; and the press of China is free, that is, it is not subject to preliminary censorship; but its after responsibility is abundantly severe. As a proof of its freedom, Whang-see-heou a doctor of physic, in 1779, published a book, in which he predicted the death of the reigning emperor, and spoke with some disrespect of *Kang-Hi*, who had been dead above sixty years. For this outrage he was sentenced to be cut into ten thousand pieces; but the emperor, out of his great clemency, pardoned the prediction regarding himself; and the poor author, for his disrespectful mention of *Kang-Hi*, was *only* beheaded.[10] The uniform testimony, indeed, of all Europeans who have visited China,

[9] The following is a verbal translation of his celebrated *Ode on Tea*, which has been painted on all the tea-pots of the empire —

"On a slow fire set a tripod, whose colour and texture show its long use; fill it with clear snow water, boil it as long as would be necessary to turn fish white and cray-fish red; throw it upon the delicate leaves of choice tea, in a cup of *yoe* (a particular sort of porcelain). Let it remain as long as the vapour rises in a cloud, and leaves only a thin mist floating on the surface. At your ease drink this precious liquor, which will chase away the five causes of trouble. We can taste and feel, but not describe, the state of repose produced by a liquor thus prepared."

[10] The dangers attending authorship in China are strikingly illustrated by the fate of Whang-see-heou, whose crime is thus set forth in the report of his judges.—

"We find," say they, 1st, "That he has presumed to meddle with the great Dictionary of Kang-hi; having made an abridgment of it, in which he has had the audacity to contradict some passages of that excellent and authentic work. 2d, In the preface of his abridgment, we have seen with horror, that he has dared to write the *little names* (that is, the primitive family names) of Confucius, and even of your Majesty—a temerity, a want of respect, which has made us shudder. 3d, In the genealogy of his family and his poetry, he has asserted that he is descended from the Whang-tee.

"When asked why he had dared to meddle with the great Dictionary of Kang-hi, he replied—That Dictionary is very voluminous and inconvenient: I have made an abridgment which is less cumbersome and expensive.

"Being questioned how he could have the audacity to write, in the preface to this Dictionary, the *little names* of the emperors of the reigning dynasty, he answered—I know that it is unlawful to pronounce the *little names* of the emperors. I introduced them into my Dictionary merely that young people might know what those names were, and not to be liable to use them by mistake. I have, however, acknowledged my error, by reprinting my Dictionary, and omitting what was amiss.

"We replied, that the little names of the Emperor and of Confucius were known to the whole empire. He protested that he had long been ignorant of them; and that he had not known them himself till he was thirty years old, when he saw them for the first time in the hall where the literati compose their pieces in order to obtain degrees.

"When asked how he dared to assert that he was descended from the Whang-tee, he said,—It was a vanity that came into *my* head; I wanted to make people believe I was somebody."

If there were in these three charges any thing really reprehensible, according to the broad principles of universal morality, it was the fabrication of an illustrious genealogy. This imposture, censurable in any case, might have been designed to make dupes, and perhaps to form a party; but the judges of Whang-see-heou attached less importance to this charge than to the other two. They declared the author guilty of high treason on the first charge, and pronounced this sentence:

"According to the laws of the empire, this crime ought to be rigorously punished. The criminal shall be cut in pieces, his goods confiscated, and his children and relatives above the age of sixteen years put to death. His wives, his concubines, and his children, under sixteen, shall be exiled and given as slaves to some grandee of the empire."

The Sovereign was graciously pleased to mitigate the severity of the sentence, in an edict, to this effect —

"I favour Whang-see-heou in regard to the nature of his punishment. He shall not be cut in pieces and shall *only* have his head cut off. I forgive his relatives. As to his sons, let them be reserved for the great execution in autumn. Let the sentence be executed in its other points—such is my pleasure."

prove that the freedom of the press there is a mere shadow; and such a thing as a bold patriotic writer, who would expose or resist any tyrannical abuse, is in China unknown.

In China learning has its livery: those who have taken the lowest degree wear a blue gown, with a black border round it, and a pewter or silver bird on the top of their cap; those who have taken the second degree are distinguished by a dark-coloured gown with a blue border, and wear a gold or copper-gilt bird in their cap; while the first degree is denoted by a rich and precious girdle.

Arts and Sciences.] The Chinese are far behind in the sciences; although in the manual arts they discover skill and ingenuity.

Astronomy.] In astronomy they pretend to have made some discoveries at a remote period; but such pretensions are false. Observations, it is true, of the heavenly bodies, appear to have been recorded by them at a very early age; but they were followed up by no inferences, and led to no results. Even to this day, they suppose the earth to be a square body, fixed in the centre of a hollow sphere, to the surface of which the stars are attached. An astronomical board has long existed in China; but its sole business is to make a national almanack, and point out the lucky and unlucky days; the prediction of eclipses or other astronomical phenomena having never been attempted by the Chinese. The tables of the time of sun-rise, new and full moon, &c. are always intrusted to a European. Their year is lunar, and consists of 354 days; but an additional month is intercalated in the third, sixth, ninth, eleventh, fourteenth, seventeenth, and nineteenth year of a cycle, containing nineteen. The first month begins with the new moon, after the sun enters Aquarius. The months have 29 and 30 days alternately. The day of 12 hours begins at 11 o'clock at night, according to our reckoning, and each division of it is equal to two hours of solar time. The night is also subdivided into five watches, which vary in length with the season. Each hour, as well as every year, has its peculiar name. Astrology appears to have almost a universal prevalence, a circumstance which fully authorizes us to conclude, that correct notions of astronomy are very uncommon. Instead of labouring to rectify the ideas of the people in this respect, the court, that is, the most learned men of the nation, by acting from the same principles, rather assist in confirming the error. The emperor always avoids engaging in any public business when an eclipse approaches. He pretends to humble himself for his faults, and asks of his people such advice as may enable him to amend his conduct. When such is the practice of the most learned in the nation, the minds of the uninformed cannot be supposed to possess true notions.

Architecture.] The architecture of the Chinese is remarkable for its airiness and singularity. Some of their pagodas are from 80 to 160 feet in height, and have as many as nine stories, although the greater number have only two or three stories. Their triumphal arches are numerous, but neither very high nor well-proportioned. Ornamented vaults of various shapes and sizes, and a series of terraces, within the highest of which the corpse is deposited, are some of the expedients they adopt in order to soothe the spirits of the deceased. Their bridges are elegant, and some of them of great magnitude, but few of them solid or durable.

Great Wall.] The great wall which separates China from Tartary is the most remarkable architectural monument of China. A large bulwark or pile of stones thrown up on the edge of the Yellow sea, in lat. 40° 2′ 30″ N. and long. 3° 22′ 6″ E. of Peking, forms one extremity of this vast work,

from which it proceeds westward, with various curvatures, to lat. 39° 48′ N. and 17° 37′ W. of Peking, thus making 21 degrees of longitude, including, with its windings, a length of about 1,500 miles. It passes through valleys and over mountains, and is carried over streams by means of arches. In some places it is only a simple rampart; in others it has foundations of granite, and is built of brick and mortar. There are gates in it at intervals, strongly fortified and garrisoned. The building of it is said to have been commenced, B.C. 215, to prevent the incursions of the neighbouring barbarians; and it was probably the work of several generations. Its height is various, from 15 to 30 feet high, and its breadth would permit six horsemen to ride abreast of it. It is calculated that the materials of which it is composed would be sufficient to erect all the dwelling-houses in England and Scotland.

Arithmetic.] The Chinese are entirely ignorant of geometry and algebra; but they are ready and rapid in arithmetical calculations, although their results are obtained only by means of a reckoning-table, something like the *abacus* of the Romans. It consists of a board, about a foot long and half a foot broad, inclosed by a border about an inch and a half deep, and divided into two unequal parts by a transverse partition of the same depth and breadth. On eight or ten wires, crossing this partition, balls are strung, two in the smaller or upper division of the board, five in the larger or lower; each of the first set stands for five, and each of the other for a unit; and by pushing one of the upper balls to the edge of the board as often as five is added to the number found, they can very conveniently keep the tens and units distinct, and calculate with much ease and expedition. Their numerals bear some resemblance to those of the Romans.

Optics.] In optics the Chinese know the use of lenses and manufactured spectacles, and burning glasses of crystal, though they know nothing of the principles of the science.

Chemistry.] Some of the practical parts of chemistry have been common to the Chinese for ages; but in this, as in other sciences, they are mere artists, and never seek to discover the simplest principle of those processes that are known to them.

Medicine.] The medical knowledge of the Chinese is said to be truly despicable. Anatomy must be unknown, since dissection is considered more as the business of a butcher, than of a philosopher. Setting bones, replacing a dislocated joint, bleeding by scarification, or puncturing with a silver needle, and burning tow made of the leaves of wormwood on the part affected, are nearly the sum total of Chinese surgery. Should a surgeon in China open the vein of his patient, and should the patient in a short time afterwards die, whatever might be the cause of his death, the surgeon would be exposed to the danger of losing his own life. Their medicines consist chiefly of herbs, which are said to be administered with very little skill. In midwifery, their knowledge appears to be somewhat greater; but no man is allowed to practise that art. Books of instruction are drawn up for the women, showing the state of pregnant women at various periods, and giving directions for the treatment of a great variety of cases. The vaccine inoculation has lately been introduced by the British. Quacks, who abound in countries where medical knowledge has arrived at considerable perfection, must be more numerous where that kind of knowledge remains imperfect. In China, however, the presumption of the quacks is still greater than in Europe. In the latter, the most valuable of their drugs only cure every disease. In the former, there are specifics

which insure immortality, that is to say, an endless life upon earth. That such medicines should be fabricated is in itself sufficiently remarkable: but when we are informed, that, by some of the learned, the assertion has actually been believed, we can scarcely avoid inferring, that they have learned to very little purpose.

Music.] The Chinese know nothing of the scientific part of music, although music forms a part of all their public and religious ceremonies. They have a method of noting their gamut of five tones and two semitones, but they know nothing of key, time, or expression. They do not arrange their bands to play in parts, or to form any harmony from the union of different melodies. Their music has, therefore, been said to be entirely original, or the wreck of a style more ancient than any at present known. Noise and rapidity are the great criterions of excellence among them. Dried skin, stone, metal, baked earth, silk, wood, the bamboo, and the gourd, are the eight bodies formed, they say, by nature, to give eight distinct sounds, whence their musical instruments are divided into eight classes. 1. Drums, commonly covered with buffalo-hides, and sometimes 40 feet in circumference. 2. The *king*, a row of square siliceous stones strung on a reed by one angle, and struck with a stick. 3. Bells, cymbals, and gongs, made of tin, copper, and bismuth. 4. The *Hiuen*, a hollow egg of baked earth, with six holes to produce notes, and one for the blower. 5. *Shi* and *kin*, each of them a kind of lyre. The first is nine feet long, and often has 25 strings; the other is five feet long, and has seven strings of silk, played upon by the finger, or a small stick. A two-stringed fiddle, and different sorts of guitars, rank in this class. 6. *Chú*, *yú*, and *chúng-tú;* the first is a hollow bushel, struck in the inside with a hammer; the second, shaped like a tiger, emits a sound when scraped on the back with a rod; the third is a bundle of 12 pieces of wood, against which they beat time. 7. Flutes and clarionets, some of them very discordant, and others monotonous. 8. The *sheng* or *sing*, the lower part of a gourd, in which a row of pipes is fixed, with a curved and lateral one on which the performer blows. This is one of the most agreeable of the Chinese instruments.

CHAP. V.—GOVERNMENT—LAWS—REVENUE—ARMY AND NAVY.

THE form of Government among the Chinese is patriarchal. The emperor possesses the most unlimited power over all beneath him; he claims the title of the Father of his People, and a spirit of filial reverence for him is universally inculcated as one of the first duties and most sacred principles that can be cherished by the children of the Celestial Empire.

Emperor's Council.] The government is composed of the emperor's council, and of the great public tribunals. The emperor's council is composed of the ministers of state taken from the Colao, or first order of mandarins, of the presidents of the supreme tribunals, of their assessors and secretaries: but is never assembled unless upon affairs of the greatest importance; and, in general cases, every thing is directed by what is called the inner court, or private council of the emperor.

Public Tribunals.] There are six superior tribunals at Pekin, viz: the tribunal of Ranks and Dignities; the tribunal of Revenue; the tribunal of Forms and Ceremonies; the tribunal of Penal Law; the tribunal of Public Works; and the Military Tribunal. Each of these six supreme tribunals

has two presidents, one of whom must be a Tartar by birth; and 24 counsellors or assessors, one half of whom are Tartars, and the other half Chinese. In order to check these various tribunals, it is enacted that none of them shall have absolute authority, even in its own department, and its decisions can have no effect, without the concurrence of the other courts.

There is also a very important tribunal, called Too-tche-yuen, or *tribunal of public censors*, who have the inspection of the whole nation, of the emperor himself, of the supreme tribunals, of the different orders of mandarins, and of every class of citizens. Along with the chiefs of the several tribunals, they have the privilege of addressing remonstrances to the emperor himself; but it would be a capital offence in any of them to fail in showing due respect to the person of the sovereign. This tribunal sends an inspector general, called Ko-tao, to each of the six supreme tribunals, who takes no part in the deliberations of these courts, but merely observes all that passes; and, without even communicating with his colleagues, renders an account in secret to the emperor of all that he has noticed. The same tribunal likewise sends visitors, every three years, to each of the provinces; and these officers, as soon as they reach their respective destinations, are superior to the governors and mandarins, whose administrations they inspect, but whose oppressions they seldom denounce, unless when they are very flagrant and extensive. They despatch even secret visitors through all the provinces; and their inquiries are dreaded by all classes in the state.

While it is by means of the viceroys and mandarins that the emperor governs and reigns, it is by means of these different tribunals, that he knows and sees, as it were, every thing that is transacted throughout his immense empire. As the grandees and mandarins, in their different stations, have a right to a part of that reverence which is due to the sovereign from whom they derive their authority; he is careful, both for his own safety and the welfare of his subjects, that these officers be prevented from abusing their power, or acquiring too much influence over the people. He, therefore, changes them regularly every three years; obliges them to present themselves before him, both when they depart for their respective stations, and when they return; and, in order to retain a stronger hold upon their allegiance, causes their children to be educated in the imperial college of Pekin. An ancient custom of the empire also requires that they shall become their own accusers, and make confession of their faults; but as it may well be supposed, that they would be inclined to palliate and conceal whatever affected their character, in order that the emperor may know the truth, he despatches the secret inspectors from the tribunal of censors; and according to the information received from them, after personal inquiry in the districts of the mandarins under examination, the emperor punishes or rewards; and, that these proceedings may have their full effect for the restraint or encouragement of others, the names of those who have been censured or approved, cashiered or promoted, are inserted in the court gazette. This absolute sovereign, in short, always vigilant, distrustful, and severe, looks into every quarter; exalts or degrades his grandees in succession; and it is upon the instability of offices, and the desire of obtaining them, that he rests his own security and that of his dominions. The policy of the Chinese emperor is to make every thing depend upon himself; to change the persons, who are in office, at his pleasure; to keep up a constant mutual jealousy among the mandarins; to take care, that no one becomes too wealthy and powerful; and to be continual-

ly dividing anew the immense riches and authority, of which he has the entire disposal.

Corruption and oppression.] This plan, however, of governing the people as a family, which is the precept of Confucius, is more beautiful in theory, than practicable in reality; and, as the sovereign is unable to see every thing with his own eye, all his superintendance and vigilance are rendered unavailing, by the want of integrity in his deputies. These imperial commissaries, whose function is so formidable, who possess the authority of the emperor, who examine the conduct of the great officers, and who have the power of accusing and deposing in their hands, seldom execute their orders with due fidelity. As soon as they arrive in a province, all the mandarins hasten to wait upon them, to anticipate their wishes, and to beg their acceptance of presents. All the mandarins, intrusted with any commission from the court, are nominated by the ministry; and, as soon as their term in office is expired, they make presents to the ministers, the princes of the blood, the presidents and assessors of the tribunals, and then sit down with the rest of their gains, in full security of no inquiry being made into their administration. All complaints must pass through the principal officers, before they can reach the emperor; and these persons are all so united in interest, that no remonstrance reaches the throne without their full consent. This love of presents has always prevailed in China among the mandarins; and all the attempts of the emperors to check the practice have proved ineffectual.

Thus, with the greatest possible show of paternal regard for the good of the people, they are miserably neglected in the points most essential to their welfare; and in the times of famine, while the gazettes are full of the emperor's expressions of sympathy for his children, and of the measures adopted for the relief of the distressed districts, so many delays are practised, that the calamity is generally at an end before the imperial succour arrives. Sometimes these seasons of scarcity give rise to violent commotions,—to robbery, murder, and even, it is said, to cannibalism. Then, indeed, the severity of the government is displayed, and the supreme authorities coldly calculate the necessity of putting to death a certain number of individuals, in order to restore tranquillity. "The Chinese, in short," observes the same intelligent writer, (M. De Guignes,) to whom we have already referred, "are treated in a most rigorous manner; and if they do not always complain, it is because they would gain little by doing so."—"I have lived a long time," he adds, "in China. I have traversed that vast empire in all its extent. I have every where seen the strong oppress the weak, and every man, who possessed any portion of authority, employ it to harass, to burden, to crush the people."

Causes of its permanency.] Such is the mode, in which this government, which has been so highly extolled, and whose stability has been held up as a proof of its perfection, is found to be generally administered; and how, then, are we to account for its duration and tranquillity? It is still a matter of doubt, and sufficiently open to dispute, whether the peace and permanency of the Chinese government is to be attributed to its having been originally adapted to the genius and habits of the people, or to its having completely subdued and moulded their dispositions and manners to its views and maxims.

The basis of the whole system is, the natural and unlimited authority, which a parent is understood to possess over his offspring, as long as they live; a maxim which has been industriously inculcated for ages upon the

natives of China, and which is now completely interwoven with all their earliest feelings and principles. The emperor is regarded as the common father of his people, and is accordingly invested with all that absolute dominion which a parent is considered, in that country, as necessarily possessing over his family. He is not only placed above all earthly control, but is supposed also to be of more than mortal descent. Hence he not merely takes the title of "the Great Father," but likewise styles himself "the Son of Heaven," and "the sole Ruler of the World." He himself, too, gives the example of that submissive respect, which, as the general parent, he claims from his subjects; and, at the commencement of every new year, he prostrates himself in the presence of the empress-dowager, before he receives the prostrations of his officers and attendants. The same principle pervades all the branches of authority; and the governor of a province, a city, or any other department, is considered as the father of all who are under his immediate jurisdiction. In practice, however, as has been shown, this plausible theory is sadly defective; and the parental affection and care of the governor has rather the appearance of cruelty and oppression; while the filial duty of the governed is little better than fear, deceit, and disaffection. The very conduct of the monarch gives sufficient proof, that it is an artificial policy, rather than an arrangement of nature, by which he rules; for, in direct opposition to that confidence and delight, with which a father should appear in the midst of his family, it is the first and great maxim of state, that he should show himself as rarely as possible to his people in public, and then only, when he is invested with the utmost degree of magnificence and splendour.

The following causes have also been assigned, as perhaps contributing their share of influence to the support of the constitution. 1. The low state of civilization among the Chinese, which prevents their acquisition of enlarged views of political freedom: 2. The natural barriers of the country excluding foreign enemies, and the extreme caution of the government in admitting strangers into the empire: 3. The difficulty of making progress in the language, which keeps the body of the people in ignorance: 4. The complete religious toleration which is exercised, (with only one exception, that of Christianity,) neither prohibiting the people from embracing any sect that they choose, nor compelling them to contribute to the support of one which they dislike: and, 5. The means which are employed to inculcate sober habits, and to render individuals reserved, formal, suspicious, and unsocial, which prevent all haranguing and caballing, all conferences about political right or wrong, and all plans of opposition to the will of the government.

Chinese Court.] The following description (by Lord Macartney) of the festival on the anniversary of the emperor's birth-day, will convey to our readers a better idea of the splendour and ceremonies of the Chinese court, than any abridged view that we could attempt to give. "The 17th of September, being the emperor's birth-day, we set out for the court at three o'clock in the morning.—We reposed ourselves about two hours in a large saloon, at the entrance of the palace inclosure, where fruit, tea, warm milk, and other refreshments, were brought to us. At last, notice was given, that the festival was going to begin; and we immediately descended into the garden, where we found all the great men and mandarins in their robes of state, drawn up before the imperial pavilion. The emperor did not show himself, but remained concealed behind a screen, from whence, I presume, he could see and enjoy the ceremonies, without incon-

venience or interruption. All eyes were turned to the place where his majesty was imagined to be enthroned, and seemed to express an impatience to begin the devotions of the day. Slow solemn music, muffled drums, and deep toned bells were heard at a distance. On a sudden the sounds ceased, and all was still. Again they were renewed, and then intermitted, with short pauses; during which, several persons passed backwards and forwards in the *proscenium*, or foreground of the tent, as if engaged in preparing some *grand coup de theatre.* At length the great band, both vocal and instrumental, struck up with all their powers of harmony; and instantly the whole court fell flat upon their faces before this invisible Nebuchadnezzar.—The music might be considered as a sort of birth-day ode, or state anthem, the burthen of which was, 'Bow down your heads, all ye dwellers upon the earth; bow down your heads before the great Kien-long, the great Kien-long.' And then all the dwellers upon China earth there present, except ourselves, bowed down their heads, and prostrated themselves upon the ground, at every renewal of the chorus. Indeed, in no religion, either ancient or modern, has the divinity ever been addressed, I believe, with stronger exterior marks of worship and adoration, than were this morning paid to the phantom of his Chinese majesty. Such is the mode of celebrating the emperor's anniversary festival, according to the court ritual. We saw nothing of him the whole day, nor did any of his ministers, I imagine, approach him; for they all seemed to retire at the same moment that we did."

The only companions of the emperor, in his leisure hours, are his women and eunuchs. His wives are distributed into three classes. The first class consists only of one, who has the rank of empress; the second, of two queens, and their attendants; and the third, of six queens, with their train. To these are added a hundred ladies, usually called the emperor's concubines, but forming an equally legal part of his establishment; and men of the first rank account themselves highly honoured, when their daughters are admitted into this number. Their children are all considered as branches of the imperial family; but the male issue of the first empress is generally regarded as the heir apparent to the throne, though this depends upon the will of the emperor, who has the sole right of nominating his successor, and of choosing him out of any class or family in the empire. The daughters of the sovereign are generally given in marriage to Tartar princes and officers, and rarely to a Chinese husband. The emperor's women are doomed to reside for ever within the walls of the palace; and, after his death, they are immured for life in a separate building, called the palace of chastity.

Law.] The laws of China may be arranged under the following heads, viz. the different kinds and degrees of punishment authorized by them; the principal provisions which they make in some of the most important cases; and the mode of their administration in the apprehension and trial of delinquents.

The punishments in common use are, 1. The bastonade, which is inflicted by the pantse or bamboo. This instrument consists of a lath of bamboo, about five or six feet in length, and four inches in breadth at the end which is applied to the culprit. "It is generally applied in a severe and cruel way, and it is seldom that a delinquent survives after receiving fifty blows. This instrument is in constant application, and is inflicted for the smallest offence. The more ordinary chastisements are not attended with disgrace, and are considered merely as a slight paternal correction.

It is said to be frequently inflicted in this view, by the emperor himself, upon his courtiers and prime ministers, without their forfeiting his favour, or losing their respectability with the nation; and one officer may apply it to another, in a very summary manner, upon his failing in any duty, or even neglecting to salute his superior with proper respect. When it is inflicted in a court of justice, the presiding mandarin takes a small stick, about six inches in length, and one in breadth, and throws it on the ground. The culprit is instantly seized by the attendants, and stretched upon his face on the earth, his clothes pulled down to his heels, and five smart blows applied to his posteriors; and for every stick that the mandarin throws from his bag, five additional blows are inflicted. The offender must then throw himself on the ground before the judge, incline his body to the ground, and give him thanks for the care he takes of his morals. This is affirmed to be done even by the higher officers to their superiors. When women are subjected to this punishment, they are permitted to wear an upper and under garment, except in cases of adultery, when they are allowed only the under garment. It is said that a Chinese when undergoing the bamboo, cries out in a most piteous manner, and makes his acknowledgments afterwards with the utmost humiliation; but that a Tartar generally suffers in silence, grumbles against the execution, and at length sullenly retires."

2. The tcha or kangue.—This moveable pillory is a wooden collar, generally about three feet square, and varying from 60 to 200 pounds weight. During all the time this machine is worn, which is for weeks or months, night and day, the criminal is unable to see his feet or to put his hand to his mouth, and would die of hunger had he no one to administer his food. The culprit is exposed a given time every day in some public place.

3. Banishment, in which case the culprit's family is allowed to follow him: all banished persons are obliged to wear a red cap.

4. Dragging the imperial barks on the canals for a given number of years.

5. Death by strangling or beheading. When the crime is of an atrocious nature, the criminal is ordered for execution without delay: in general, however, it is postponed till autumn, when all those under sentence of death throughout the empire are executed in one day.

In cases of great moment, the Chinese laws authorize torture, in order to extort confessions. With respect to all offences committed against the sovereign, they are particularly severe. Those convicted of treasonable practices, are put to death by slow and painful tortures; all their male relations in the first degree, are indiscriminately beheaded; all their female relations are sold into slavery; and all their connexions residing in their households, relentlessly put to death. Even to intrude into the line of the imperial retinue while the emperor is travelling, or to enter any of the apartments in the palace actually occupied by him or any of his family, is punished with death. Nay, to ride, or walk upon the road along which the emperor is to pass, exposes the offender to severe punishment. The workmen employed about the buildings and grounds belonging to the palace, have their names inserted in a list as they go in and come out; are provided with passports, as they enter the gates, which they must deliver back at their return: they are regularly counted as they pass and repass, and if any stops behind, he is subject to capital punishment.

The life of the subject is held peculiarly sacred; and (infanticide ex-

cepted) murder is never overlooked. To administer poison is a capital crime, though the dose should not take effect. Killing in a scuffle, is also punished with death. Killing, or even wounding by mere accident, is still punishable by death; only, in this case, the offender may redeem himself, by paying a fine to the friends of the deceased. The mere attempt, or design to commit parricide, is punished with death; and if actually committed, with death by torture. To strike a father, mother, grandfather, or grandmother, is punished by beheading. Should a wife strike her husband's relations in any of the above degrees, she is beheaded: should she strike her husband, she is punished threefold more severely than for a common assault; should she maim him, she is beheaded; and should he die, she is executed by torture. Anonymous accusations are punished with death, even should they prove true. A parent chastising his child so as to cause death, is punished only with 100 blows; and no law whatever exists against infanticide.

The mere attempt to steal, is punished with 50 blows; but if the theft is actually committed, by from 60 to 100 blows, or by death, according to the value stolen. In cases of robbery and theft, the mandarin and soldiers of the district are exposed to repeated floggings, or to dismissal from their office, if they fail to discover and convict the offender. Robbery is always punished with death, if the persons robbed be wounded, or the robbery be committed during the night. Fornication, and certain unnatural crimes, are punished with 70 blows; adultery, with 100 blows. Rape subjects the offender to death, while even the attempt is punished with 100 blows and perpetual banishment.

The law ordains the debtor's goods to be sold, and payment to be made; or if he has no substance wherewith to liquidate the debt, he receives 30 blows, and a month's delay to make payment; and so on, at the rate of 30 blows per month, till he satisfy his creditor. Hence the poor debtor is often obliged to render himself a slave, when he has no other means of extricating himself from his difficulties.

Persons under fifteen, or above seventy, or maimed, are allowed to redeem themselves from all but capital punishments, by a small fine. Under ten and above eighty, even when capitally convicted, to be recommended to the clemency of the emperor. Under ninety and above seventy to be punished for nothing but treason.

In matters of police, the process is very summary, especially if the mandarin has been a witness of the offence. He does not wait till a complaint be made, nor does he send the offender to prison to be brought to trial afterwards, but instantly interrogates, judges, and punishes him upon the spot. Cities are divided into distinct quarters, of which every one is superintended by an officer of police. Every master of a family is accountable for the actions of all its members. Several families are subjected to the inspection of an individual in their neighbourhood. At night the gates are shut. Numerous patroles pass the streets, in every direction; and none is allowed to remain on them, who cannot give a satisfactory reason for his conduct. In this manner, the quiet of the citizens is insured; and that subordination is maintained, which appears to be one of the chief supports of the Chinese government.

The characteristic defect of the whole system is an unprofitable minuteness of regulation, an intolerable interference with every ordinary duty of life, and an unnecessary endeavour to fix every shade of distinction, which a case may receive from its circumstances. Thus, indeed, nothing

whatever is left to the discretion of the judge, and every offender may almost anticipate his sentence; but the system is completely destructive of personal freedom, and resembles more the irksome discipline of a school, than the judicious restraints of an enlightened government. It is sufficiently adapted to keep subjects in order, and to repress private injuries among individuals; but it is a dead weight upon every thing like dignity of mind or delicacy of feeling, and would be felt as the most cruel oppression by a high-spirited and generous-minded people. The formation of such a code seems to belong to a state of society not much advanced beyond the first stages of civilization, and its direct tendency evidently is to prevent the people, under its influence, from making any farther progress in the political improvement of their condition, or in personal refinement of character. The indiscriminate frequency of corporal punishment must infallibly prevent such attainments, and fixes the subjects always in the condition of grown children, who are kept in order by mere flogging. Offences of all descriptions, and in every rank of society, are punished by a certain quantity of flagellation; and there are at least 50 clauses in this code of laws, by which a general officer is ordered to receive, for particular offences, 50 lashes upon his posteriors; while he is allowed to continue in the command of the army. Such a system of whipping men into good morals and civil manners may be adapted to the peculiar genius of the people among whom it prevails; but it could never have originated, nor have continued to be endured, except in a country where there existed, in an extreme degree, a general debasement of all character.

Revenue.] A tithe land-tax, and a tax on the workshops of artizans, are the principal sources of revenue in China. The land-tax is at the rate of one dollar for five *mows*, each mow equal to about one-fifth of an English acre. The revenue is payable in money and grain. There are also excise taxes on coal, salt, and a variety of other articles, so that China, like our own country, is oppressed by numberless functionaries, in the shape of excisemen, collectors, appraisers, &c., the expense of maintaining whom equals, in many cases, the assessment, and whose rapacity and insolence grieve and degrade the spirit of the people. The Chinese minister who favoured lord Macartney with a census of the population, also furnished him with an abstract of the revenue, making it amount to £60,000,000 sterling; but as the one has since been proved to have been greatly exaggerated, no reliance can be placed on the other. Indeed, it is difficult to gain any faithful information on this subject. The following table is from a Chinese manuscript work, compiled in 1823, by a person named Wang-Kwei-Shing, and from a government publication entitled Tsin-shin.

Revenues by taxes and duties.

Taels, 6s. 8*d*. each.

Payable in money,	33,327,056=	£11,109,018	6s. 8*d*.
Payable in grain,	41,134,577=	£13,711,525	13s. 4*d*.
		£24,820,544	0s. 0*d*.

To this add duties at Canton on the foreign trade with the English East India Company and the Americans.

Taels,	1,670,299=	£00,556,766	6s. 8*d*.
General total,		£25,377,310	6s. 8*d*.

The total amount of grain, including rice, annually received, according to the above table, is stated at 4,230,959 shih, each shih being 140lbs., equal to 264,000 tons. The quantity of grain and rice retained in the

provincial granaries for the supply of troops, and against a scarcity, is the following:

Grain, 25,481,164 shih.
Rice, 5,115,625 do.

Total, 30,596,789 shih.=1,912,000 tons.

Disbursements.

Civil service.—Taels, 3,623,730 £1,207,910 sterling.

Military Disbursements.

Number of stationary troops, 1,263,000.
Pay annually, . Taels, 20,884,203=£6,961,401.

Miscellaneous expenses.

Annual repairs of the dykes of the Whang-ho.
Taels, 2,000,000=£0,666,666 6s. 8d.
Do. of the Yuen-Ming gardens and imperial residence of Jehol in Tartary
Taels, 1,000,000=£0,333,333 3s. 4d.
Expenditure of the imperial palace, Hanlin college, and salaries of the ministers of state, amounting, with their dependents, to 3,525 persons.
Taels, 5,819,123=£1,939,707 13s. 4d.

General total, 33,327,005=£11,109,018 3s. 4d.

In some of the provinces the expenditure greatly exceeds the revenue, as in Shing-king or Lyautong, where the deficiency is 41,619 taels, and in Kausuh, the N.W. division of Shense, where it amounts to 1,859,395 taels, in the civil and military disbursements. According to De Guignes, the whole revenue in 1777 was £29,597,086 sterling, and the expenditure, £20,837,540 sterling, thus leaving a surplus of £8,759,546. This is certainly a very comfortable balance after such an extraordinary expenditure in the military and naval departments. One would imagine if such a surplus were annually left in the imperial exchequer, that it would be overflowing with money, and yet in the late war with the Mahommedans of Khashghar, the emperor was in great distress for money to meet the increased expenditure, if the Canton accounts are worthy of credit. Besides the revenue given in the table above for 1823, great sums are received by the public sale of government situations, a most pernicious practice which commenced under the Han dynasty, and which is a great source of corruption and oppression. A very spirited remonstrance from two of the ministers was presented to the present emperor, Taoukwang, in 1822, against this glaring system of corruption, urging its abolition as destructive to the empire, and proposing, in lieu of it, a system of retrenchment in the imperial expenditure. The remonstrance was well received by the emperor, who said that such ministers deserved well of their country, but we have not yet heard that the sale of public offices has been since abolished. It may here be remarked that Sir George Staunton's account of the Chinese revenue is entirely taken from Du Halde, and that the taels are valued in Du Halde at 8s. 7d. each, instead of 6s. 8d. as in the statement above. The fact seems to be, that there is no agreement amongst the various writers who have given us Chinese statistics, respecting the amount of the revenue, whether in money or goods, and this must either arise from our ignorance of the actual amount of the Chinese revenue, or from the great fluctuations in it.

Military Force.] Respecting this branch there is as little agreement as about the amount of the revenue. But the following statement is given as the amount of the military establishment, and their cantonments.

Provinces	No. of Troops	Provinces	No. of Troops
Shinking or Lyautong,	4,000	Shan-se,	53,000
Imperial city,	26,000	Shen-se,	104,000
Chih-le or province of Peking,	131,000	Kan-suh,	123,000
Keang-soo Gan-hwuy,	132,000	Sech-wen,	85,000
Keang-se,	39,000	Kwang-tung,	99,000
Chih-keang,	59,000	Kwang-se,	42,000
Fookein,	76,000	Yun-nan,	53,000
Hoop-pih,	37,000	Kwei-chou,	70,000
Hoon-nan,	51,000		
Honan,	24,000		1,263,000
Shan-tung,	35,000		

Commanded by 7,552 military officers.

The cavalry is estimated at about 400,000 and the infantry at about 822,000. The army is chiefly composed of Tartars, who, in this, as in every other department, take the lead. To them is intrusted the protection of the frontiers, and of the great cities of the empire. The Chinese soldiers are represented as being despicable cowards, and indeed cowardice is a characteristic of their countrymen. The dress of the military varies in different provinces: blue jackets bordered with red being worn in some, brown and yellow in others; but sugar-loaf caps, terminated by a spear, and long tufts of scarlet hair, seem to be the proper distinction of a soldier. Cuirasses of quilted cloth, thickly studded with brass knobs, are worn in some districts; and shields of basket-work, two feet long, and painted to look like the heads of dragons, are used by a corps called *the tigers of war*. Fans and umbrellas are a part of the equipment of every Chinese soldier; and this reminds us of Voltaire's caustic answer to the question if he had any news: "Yes," said he, "his holiness the pope has ordered a new blunderbuss and umbrella to be given to each of his soldiers—both to be returned at the end of the year in the same state in which they were delivered."

The arms of the Chinese are swords, pikes, matchlocks, and bows, except when, acting as policemen, they exchange these for a more offensive weapon, and one with which they are more formidable—the whip. Their matchlocks are provided with a stand upon which they can rest, when discharged. Nothing can be more contemptible than their artillery. The petards, with which they fire salutes, have a very small bore; they are stuck perpendicularly in the ground, and discharged by a train, communicating one with another.

The soldiers are divided into companies of 25 men, each company having its own standard, which is triangular, and about six feet high—hence the Chinese army is estimated by the number of its banners. The colour of these banners vary—among the Tartars being either white, yellow, red, or blue—among the Chinese, usually green. The pay of the soldiers is as follows: A foot-soldier receives one tael or 6*s*. 8*d*. monthly, besides three measures of rice; a horseman, two taels and six measures of rice monthly, besides their respective claims upon the people. What these claims are cannot be exactly estimated, but the pay, on the whole, must be comparatively good, as the common people are in general eager to enter the army.

Navy.] The navy of the Chinese is very contemptible. Their trading vessels are ill-built, and however safe in their rivers and canals, are unfit for the open sea. With a square bow, no keel or bowsprit, thick masts of one piece, single sails of bamboo-matting, folded like a fan, heavy and unmanageable, and a moveable and unsteady rudder, these crescent-shaped vessels, adorned with dragons' mouths, frightful heads, and goggle eyes, are almost ungovernable in boisterous weather, and it is inconceivable the

number of souls who annually perish with them. From Canton alone, 10 or 11,000 persons are supposed to be lost in these frail barks every year, so that the return of a merchant-man from a distant voyage, is celebrated with great rejoicings by those interested in its safety. A man-of-war differs from a merchant-man chiefly by having a narrower bottom, and a lower head and stern. It is armed with small cannon and carabines. A parapet of bamboo protects the crew, the military part of whom are provided with bucklers and lances.

Fortifications.] All the Chinese towns are fortified by a broad rampart, sometimes flanked witk square towers at intervals, faced with stone or brick, as well as protected by a ditch. These ramparts are generally from 20 to 30 feet high, and from 10 to 20 feet broad. Little attention is paid to the guns, but the gates are constructed and guarded with care. The Chinese have also fortifications on exposed points, more, however, as a protection against robbers, than a check upon the progress of a regular force.

CHAP. VI.—TOPOGRAPHY.

In the table given at the commencement of this article, the reader will find the various provinces and chief towns of China enumerated. Respecting the number of towns in China there is great discordance of opinion. According to the table compiled in 1823, from which we have already quoted, there are 183 *foos* or cities of the first rank; 225 *choos* or cities of the second rank; and 1,156 *heen* or cities of the third rank, each the capital of a district. Total 1,564. It must be remarked that these divisions belong to the civil administration of the provinces, not to the military government. The military cities are divided into seven classes, but their number has also been variously estimated, and we cannot decide the difference. According to some accounts, they are more numerous than the civil cities, according to others, they are fewer. But it must be observed, that what are called cities in China, whether they belong to the civil or military departments, or in whatever rank they are placed, are all walled; no town, however large, unless walled, ever obtains the appellation of a foo or choo or heen, or is even ranked in the seven military classes. Each province is divided into large districts called foos, which are subdivided into choos and heens, so many heens composing a choo, and so many choos a foo, or district of the first magnitude. It must not be imagined, when mention is made of a heen, a city and district of the third rank, that such district is a mere canton or bailiwick of small extent, there being many of them 60, 70, and even 80 leagues in circumference, and which pay largely into the imperial treasury. Neither must it be concluded, that because none but walled towns obtain the appellation of a foo, choo, or heen, therefore all others are inconsiderable towns; on the contrary, many of them are as large as foos, or cities of the first rank. According to Chinese accounts, besides the military cities, there are 439 castles on the coasts, several of them very large, and nearly equal to walled towns for population, besides 2,920 boroughs, or towns, along the coast, most of them in size equalling walled cities. The inland towns and villages, we are told, are incredibly numerous, and crowded with inhabitants. Of the provinces and chief towns it now remains to give a more particular account.

KING-SE OR PE-CHE-LI.] King-se ranks first among the provinces, as it contains the modern capital, Pe-king, the seat of government, and residence of the emperor. Every province is divided into cantons, districts, and townships, each of which comprehends a certain definite territory under its jurisdiction. They are called Foo, Choo, Heen, respectively, according as their capitals are towns of the first, second, and third magnitude; and are themselves subdivided into hundreds, containing only a few towns or villages. King-se contains ten of the first, forty of the second, and one hundred and eight of the third class. Those of the first are, besides Peking, the metropolis, Pao-ting, the residence of the viceroy; Ho-keen; Ching-ting, a well-built town, four miles in circumference; Chun-te, Hwang-ping, Tai-ming, Yong-ping, and Suen-hwa. Of Pe-king alone a description can be given.

Pe-king.] Pe-king is situated in a plain, at a distance of 60 miles S. from the great wall.[10] The city is divided into two parts by a high wall. The northern part, which forms nearly a perfect square, is called *King-tching*, or the 'City of the Court;' this is the Mantchoo town, and contains the imperial palace. The southern quarter, or Chinese town, is called *Vai-tching*: it is in the form of a parallelogram. The walls of the city are, in most places, 30 feet high, 25 feet broad at the base, and 12 at the top, between the parapets. Nine lofty gates crowned with turrets give ingress and egress to the inhabitants; and a semi-circular area before each gate is inclosed by a wall of the same dimensions in height and thickness as that which surrounds the city. The streets of Pe-king are, for the most part, broad, and in straight lines; they are unpaved, but clean and well kept. The shops are brilliantly ornamented, and have a gay effect. The houses are mostly of one story, built of brick, and tiled. Those in the Chinese town are inferior to those in *King-tching*. In the latter, beside the imperial palace and park, there are several other palaces, and various public edifices, temples, and lakes, occupying above half of the city. The imperial palace is not so much one building as a multitude of buildings. Its walls comprehend a little town, inhabited by the great officers of the court, and others in the emperor's service. Father Artier, a French jesuit, who obtained permission to visit the palace, says, that it is a league in circumference; that its front is embellished with paintings, gilding, and varnished work; and that the furniture and ornaments of the interior comprise every thing that is most rare and valued in China, India, and Europe. The gardens of the palace form a vast park, in which, at proper distances, mountains rise twenty or sixty feet in height, separated from one another by little valleys, which are watered with canals; these waters unite to form lakes which are navigated by magnificent pleasure boats, and their banks are adorned by a series of building. Each valley contains a spacious summer-house or villa. The mountains and hills are covered with trees, and fine aromatic flowers; the canals, skirted with rocks, so artfully arranged as to be a perfect imitation of nature in her wildest and most beautiful forms.

Besides the Chinese and Tartar towns, Pe-king has twelve large suburbs, which altogether form a very large city. Of its population, no satisfactory estimate has been given; but the truth may probably be found between a million and two million souls.[11]

[10] There are a number of interior walls connected with the great wall, and running S. towards Pe-king. From these, Pe king may be distant about 26 miles.

[11] The following details and observations regarding Pekin are extracted from Timkowski's Travels. It must, however, be remarked, that though Timkowski was six

KYANG-NAN.] Kyang-nan, or Nan-king, that is, 'the Southern Court,' was long considered as the second province in the empire, and its two

months in Pe-king in 1820, he contents himself with copying from Father Gaubil's Description of Pe-king, printed in 1765; so that the following details relate rather to that period than the present:—

"Pe-king is distinguished from other capitals and great cities of Asia by the peculiar style of its buildings, and the order which reigns in its interior. We must not look for houses of four or five stories in height; there are no fine quays, no foot-pavements, nor are the streets lighted at night. Every thing, however, in the Chinese capital indicates a country that has long been civilized. The tranquillity of the inhabitants is secured by moral institutions, by stable regulations, and by an active police. There are constantly in the streets soldiers, with swords at their sides and whips in their hands, ready to strike those who are disposed to create any confusion. They take care that the streets of King-tching are kept perfectly clean, and, in case of need, put their hands to the work themselves. They keep watch during the night, and allow nobody to go in the streets unless with a lantern, and for some necessary business, as to fetch a physician. They even question those who may be charged with commissions from the emperor, and a satisfactory answer must always be given them. They have a right provisionally to arrest any person who resists them, or is thought suspicious. The governor of the city often makes visits when they are least expected. The officers of the guard are bound to be extremely vigilant with respect to the soldiers under their command. The slightest negligence would be punished, and the officer cashiered the following day. These police soldiers are Chinese infantry belonging to the regular troops.

"There is besides at Pe-king, a body of cavalry, said to amount to 80,000 men. Their principal business is to do duty at the gates and on the walls, and to be ready to march on the shortest notice.

"One of the principal duties of the police at Pe-king is to prevent famine. In the city, as well as in the suburbs, there are numerous granaries, where a great quantity of rice is warehoused against seasons of scarcity. The regulations respecting these granaries are faithfully executed in the vicinity of the court; if they were equally well observed in the provinces, there would be no famine; but this calamity frequently occurs through the negligence of the mandarins. Besides those granaries, the emperor has others, which are filled with wheat, pulse, and fodder for the beasts of burden.

"The principal class of inhabitants in Pe-king is composed of the Mantchoo troops: the officers, who are at the same time members of the civil tribunals, but too indolent to employ themselves in investigating the causes brought before them, leave the management of business to their Chinese secretaries. When the Mantchoos took possession of Peking, the officers and privates had, for their share, the houses of the inhabitants in the southern cities. But these Mantchoos have long ceased to be any thing more than the tenants of the houses, and the lands which have been granted to them; they have consumed their property, and the estates have fallen into the hands of Chinese merchants. The military, who are in good circumstances, possess houses and shops which bring them in a considerable income.

"The merchants and artisans compose the second class of inhabitants; the former principally live in the Vai-lo-tching. The great population of the empire deprives many of the inhabitants of the means of supporting themselves by agriculture. A great number of people resort from all the provinces to the capital, to gain their livelihood; but they do not always succeed, the class who have need of workmen being very moderate in their desires. It is said, that there are in Peking fifty thousand persons, who, being without employment, have recourse to robbery and cheating. The vigilance and the severity of the police, however, keep them in good order; for, during a residence of about six months at Peking, I did not hear of a single robbery of importance. As the Chinese are extremely distrustful of the poor, and beggars always meet with a decided refusal, it is but seldom that a poor individual has recourse to this easy means of gaining a livelihood. The poor are employed in cleaning and watering the streets and gardens, and cultivating the ground; they also do the business of porters, and increase or compose the groupes which follow the processions at marriages, funerals, &c. I have often met some of these poor creatures, who had scarcely clothes to cover them, wearing cloaks of ceremony, and caps with red feathers, accompanying the funeral of some rich man. When a tradesman employs a man of this class to carry the goods which he has sold to any body, the porter faithfully delivers them, and contents himself with a remuneration of about threepence, even if he has worked for two hours.

"Wherever two streets meet, and at every bridge, there are two-wheeled carriages, answering the same purpose as hackney-coaches in Europe. They are lined with satin and velvet, and drawn by mules and horses; the first of which in particular are very active. The great people, and especially the ladies, use sedan chairs, but they must first obtain permission from the emperor. Persons in office prefer riding on horseback, which, on account of the unevenness of the streets and the great crowd, is the most convenient and expeditious mode of conveyance, as I know by experience. There are many officers in Peking who have their own carriages and horses; but, notwithstanding

subdivisions, Kyang-soo and Gan-whai, were formed into distinct provinces by the emperor Kyen-long. It is situated on the gulf of Nan-king in the Yellow sea, and its inhabitants are regarded as the most civilized of the Chinese.

Nan-king.] Nan-king is the capital of this province, and was formerly the capital of the whole empire. It is built on several hills, and said to be 25 miles in circumference, so that it may still cover the largest area of any city in the empire. It has been on the decline since 1423, when the seat of empire was transferred from it to Pe-king. Many of the temples, palaces, and public buildings, which it once contained, have mouldered away; but a number still remain, and its gates are beautiful. Its most attractive ornament and curiosity, however, is a porcelain tower, nine stories high, with an ascent of forty steps, and twenty-one between each story, making in all a perpendicular height of nearly 200 feet. A pine apple of solid gold is said to adorn its summit; its exterior is richly garnished with red, yellow, and green; and multitudes of small bells suspended from the angles of the buildings give out fine sounds at every breath of wind. The large river, Yang-tse-kyang, which discharges itself into the sea below the city, formerly afforded a convenient harbour, but is now greatly choked up. Nan-king is still the seat of learning in China; it abounds in libraries; and several colleges. It is also distinguished for its manufactures, the principal of which is silk, particularly that of plain and flowered satins.

Su-cheu-fu.] To the north of Nan-king is Su-cheu-fu, the second city in the province, and the most flourishing and luxurious in the empire. It is famous for its women, its dancers, its jugglers, and its players; it is the dictatrix of Chinese taste, and the resort of the fashionable and voluptuous. "Paradise," say the Chinese, "may be in heaven, but Su-cheu-fu is on earth!" By Europeans, it is compared to Venice. Its walls inclose an extensive area, comprehending large fields in a state of cultivation, and many separate houses, as well as the streets which properly form the town; and the whole is intersected by canals.

Besides Nan-king and Su-cheu-fu, there are a variety of other towns in the province of Kyang-nan. Yang-cheu is remarkable for its antiquity, and particularly for a fine tower which was erected in the sixth century. Hwai-nang, Hwai-cheu, Ching-kyang, and Fong-yang, are the names of

this, the owners of the above-mentioned coaches or chaises carry on a very lucrative business.

"The inhabitants of Peking receive every thing from the southern provinces. In Peking itself, there are no good manufactories, except of coloured glass. Precious stones are also cut and polished in the capital The inhabitants of the city, and the Chinese in general, prefer pork, which is here better flavoured and more easy of digestion than in Russia. The Mantchoos and Mongols eat mutton, and the latter beef. Mutton and beef are not very good in China, because the cattle coming from Mongolia are too much exhausted, and are not properly attended to after they reach the capital. Butter, especially made of sheep's milk, comes from Mongolia. The Chinese prefer hogs' lard, and cannot bear even the smell of butter made of cow's milk. The most common domestic fowl are geese, ducks, and chickens. The first are indispensable at grand entertainments. The physicians forbid patients to eat poultry, as indigestible and unwholesome. A species of duck, called ya-tsu is a very favourite dish on grand occasions, and is dressed in more than thirty different ways. The ducks of Peking are very large, very fat, and juicy. In the winter, there are partridges, pheasants, and game of all kinds. But it is necessary to be very careful in purchasing provisions, for the Chinese dealers mix plaster or sand in the flour to increase the weight. Often they sell the flesh of animals that have died of some disorder, or of such as are not generally used for food; for instance, asses, mules, camels, &c. They improve the appearance of ducks and chickens by blowing the air between the skin and flesh, which makes them look very white and plump"

other towns in this province, all of some note. *Ngan-king*, capital of the southern division of Kyang-nan, now forming the province of Gan-whai, is placed, (lat. 30° 30′ N. 117° E,) near its southern extremity, at the confluence of a small stream with the Yang-tse-kyang: it was formerly a place of little consequence, and only ranked as eighth among the districts into which the province is divided. The island of Tsong-ming, separated from the continent by an arm of the sea about six leagues in width, was converted by the convicts banished thither, from a sandy waste, into a productive, populous district. Salt, extracted from a kind of grey earth, probably the original soil of the island, is its principal production, and furnishes the means of subsistence to the population of its numerous villages. The island of Shin-shan, (i. e. the golden mountain,) near the mouth of the Yang-tse-kyang, is the private property of the emperor, and remarkable for producing the pale red cotton, (*Gossypium religiosum*,) of which the nankeens, named from the capital of this province, are manufactured.

The air of these provinces is usually clear, and their climate extremely temperate, as might be expected from their position between the 29th and 35th degrees of northern latitude. The country is generally level and well-watered; and besides a great number of smaller streams, the Yang-tse-kyang and the Hwang-ho, two of the largest rivers in China, discharge themselves into the sea on the coast of this province. Numerous canals also facilitate internal navigation, and give a power of laying the fields under water at pleasure, an incalculable advantage in dry seasons. The soil of the western districts is a dry, red clay, which acquires a yellow hue as it approaches the river, and is replaced by sand in the eastern part of the provinces. To the south, clay recurs, and a rich black mould is often found. With all these commercial advantages, these provinces may well be considered as some of the most flourishing in the empire, and its cotton manufactures, so justly celebrated all over the world, are carried on to such an extent, that one township alone is said to furnish employment for 200,000 persons.

SHAN-SI.] Shan-si, to the west of Pĕ-chĕ-li, though one of the smallest provinces, is highly venerated as the native soil of the founders of the empire. It contains five cantons or foos, sixteen districts or choos, and seventy townships or heens. 1. Tai-yuen, its capital (lat. 38° N. 110° 37′ E.), an ancient city, three leagues in circuit, was the residence of the princes of the Taï-ming-chao family; but the royal tombs on a neighbouring mountain are now the only remains of its former grandeur. They consist of monuments of stone or marble, triumphal arches, and statues of men and inferior animals dispersed through a grove of cypresses. A fruitful soil and skilful manufacturers make this city a flourishing place: hardware and various kinds of cloths, but particularly carpets, resembling those of Turkey, are its principal articles of trade. 2. Fuen-choo, on the river Fuen-ho, nearly in the centre of the province, is celebrated for its warm baths and mineral springs. 3. Tai-tong, close to the Great Wall, is a fortress of great strength, and well garrisoned. Its neighbourhood abounds in medicinal herbs, and the mountains contain marble, porphyry, lapis lazuli, and a beautiful kind of jasper. The cold in this province, which lies between the 35th and 41st parallels of N. lat., is often very severe in winter, but its atmosphere is peculiarly clear throughout the year. It is an elevated, mountainous tract; in some places rocky and barren; but cultivated wherever the soil can be

rendered productive by industry; and giving the terrace-husbandry, for which the Chinese are so celebrated, ample exercise. The warm and stony declivities of its hills are very favourable to the vine, and it has the finest grapes in China. On the summits of several of the hills there are extensive plains, as fertile as the valleys below. Besides the minerals mentioned above, these mountains abound in crystal, salt, and coal. The inhabitants have the strength of limb and constitution commonly enjoyed by mountaineers.

SHAN-TONG.] Shan-tong contains six cantons, and 114 districts and townships. Its capital, Tsi-nan, on the south side of the river Tsi, (36° 45′ N. 117° 12′ E.) was the residence of a long line of sovereigns, whose tombs on a neighbouring mountain are a conspicuous object from the city, and it is famous for its silk of a brilliant white. 2. Yen-choo comprehends within its domains, Kyo-foo, celebrated as the burial-place of Kong-fu-tsu, (Confucius.) 3. Lin-chin-choo, on the great canal, is a place of much trade, and has a splendid octagonal porcelain tower, eight stories high, which almost rivals that of Nan-king. It is, as they all are, a temple of Fo, whose image is placed in the highest chamber. 4. Tsing-choo is noted for its trade in fish-skins, and a yellow stone, extracted from the intestines of cows, and supposed, like the bezoar, to possess great medicinal virtues. The islands on the coast have several good harbours, and offer a convenient shelter for vessels navigating the Yellow sea.

This province lies between the 35th and 38th deg. of N. lat., and has generally a clear sky and moderate temperature. Its surface is level, except in the southern districts, which are mountainous and swampy. The soil is almost everywhere alluvial; and in some places there are extensive morasses thinly peopled. Rain seldom falls, but the many lakes and streams afford a constant supply of water for irrigation; and the great imperial canal adds greatly to its wealth, by making it the channel through which the chief supplies of the capital pass. A peculiar species of silk-worm, producing a coarser but stronger thread than that of the common sort; various kinds of grain, tobacco, and especially the herbaceous cotton, (*Gossypium herbaceum,*) are its staple commodities.

HO-NAN.] Ho-nan, lying immediately to the S.W. of Shan-tong, and to the W. of Kyang-nan, has eight cantons, and 102 inferior districts. 1. It is crossed by the mighty Hwang-ho, and at about 6 miles from that river, its capital Kai-fong is situated, in 35° N. 114° 55′ E. Its site is lower than the level of the river, and though protected by strong and extensive dykes, it is very liable to be overflowed; and was, in fact, completely ruined by such a calamity, occasioned, in A. D. 1641, by a body of rebels, who had recourse to that expedient in order to get possession of the place, which has never since recovered its former population and prosperity. 2. Chan-te, in the northern part of this province, is remarkable for a fish resembling a crocodile, the fat of which is said to be singularly inflammable, and also for a mountain of peculiar ruggedness. 3. Ho-nan, a little to the S. of the Hwang-ho, surrounded with rivers and in the midst of mountains, was formerly the centre of the empire, and seriously believed by the Chinese to be the navel of the world, an honour ascribed by the Greeks to Delphi, and by the Arabs to Mecca. Teng-fong-hyen, a township in this district, has an ancient tower, believed to have been the observatory of Chen-kong, an astronomer who lived nearly 1000 years before Christ, and who is said by the Chinese to have been the inventor of the mariner's compass. The instrument by which he is supposed to have found

the length of the shadow at mid-day, for the purpose of determining the latitude, is still shown. As Ho-nan was called the navel or centre of the earth, so was the province itself called Tong-hwa, or 'the central flower;' and its mild climate, rich scenery, and luxuriant soil, made it in ancient times a favourite residence of the emperors during a part of the year. The eastern side is very level, and so completely cultivated, as to appear like one vast garden; but notwithstanding its fertility, commerce does not flourish; perhaps in consequence of the effeminacy and indolence of the inhabitants. Towards the S.W. the country is mountainous and covered with forests. Cinnabar, load-stone, and talc, are found in the rocky districts; but the silks manufactured on the borders of a lake within its limits, are supposed to derive an extraordinary lustre from some peculiar quality in the water, and form one of its most valuable productions.

SHEN-SI.] Shen-si, on the W. of Ho-nan and Shan-si, formerly the largest province in the empire, is now divided into two, the former retaining its old name, the latter called Kan-sŭ. 1. The whole contains 8 foos, 22 choos, and 84 heens; and its capital, Si-ngan, on the Hwei-ho, in 34° 10′ N. 108° 30′ E. is little inferior in beauty to Pĕ-king. A strong and lofty wall, surrounded by a deep ditch, flanked by towers, and inclosing an area 4 miles in circumference, protects the public buildings and remains of antiquity which still adorn this place. It is remarkable for a gigantic species of bat, the flesh of which is highly prized by the Chinese: it is also famous for the monument found in 1625, which records the introduction of Christianity into China, by the Nestorians in the seventh or eighth century. 2. Ping-lyang, a considerable town on the western side of Shen-si, is surrounded with mountains full of picturesque and well-watered valleys; one of which is so deep as to be scarcely pervious to the sun's rays. 3. On one of the almost inaccessible mountains near Kong-chang, there is an ancient sepulchre, believed to be that of Fo-hi, the founder of the empire, and contemporary with Enoch and Methuselah. 4. Lan-choo, in 36° 20′ N. 103° 47′ E., formerly a district of the second rank, is one of the most important places in the province, on account of its trade for skins with Tatary. It has now been raised to the first rank, and is the capital of the division, now a separate province, called Kan-sŏ. A coarse kind of woollen cloth, manufactured there from cow's hair, is, together with other woollens, a large article of export into the Tátár territory.

These provinces, which lie between lat. 32° and 40°, N. long. 99° and 110° E., are celebrated for their extensive commerce. They are generally mountainous, and have a fine healthy climate, and are inhabited by a handsome and robust race of men, distinguished for courage, genius, and courtesy to strangers. The soil is favourable to the cultivation of all kinds of grain except rice; and drugs, honey, wax, cinnabar, coals, and gold ore, are brought from the mountainous districts. It is said that the government prohibits the gold mines from being worked; but a vast quantity of ore is washed down by the rivers, the collecting of which affords subsistence to a great number of persons. Between Shensee and Sechwen, there is a military road cut through an almost impassable country, with bridges across ravines of a fearful depth. It is a really stupendous work, and next to the great wall, perhaps the most remarkable proof of the resolution and perseverance of the Chinese. This hilly region is also favourable to the breeding of cattle, and annually rears a great many mules, as well as sheep and oxen.

CHE-KYANG.] Che-kyang, to the S.E. of Kyang-nan, has 11 cantons,

72 districts, and 18 townships. 1. Its capital, Hang-choo, in 30° 20′ N. 120° 15′ E., placed between the mouth of the imperial canal and that of the river Chyang, is one of the first cities in the empire. It is about 12 miles in circumference, and is said to have a population of one million. Narrow streets, well paved with broad flag-stones, large shops stocked with valuable wares, and numerous triumphal arches, strike the stranger on his first entrance, and the clear waters of the little lake, called Si-hu, which bathes the western side of the town, add greatly to its beauty. There are open porticoes, supported by pillars and paved with flag-stones, along the edge of the lake, and stone causeways crossing it in various directions, with bridges at intervals for the passage of boats beneath. Two islands in the centre are each adorned with a temple, and provided with houses of entertainment, for the convenience of those who wish for refreshment or relaxation. "Its natural and artificial beauties," says Mr Barrow, "exceeded every thing previously seen in China." Bold and lofty mountains, valleys clothed with trees, especially the camphor-tree, (*Laurus Camphora*,) tallow-tree, (*Bassia*,) and arbor vitæ, (*Thuja*,) with their different shades of green and purple; sepulchres of light and singular structure, half concealed by groves of cypresses; parties of pleasure in boats on the lake, present a richness, variety, and animation of scenery, which fully justify the glowing terms in which the Chinese extol the charms of Hang-choo. 2. Hu-choo, on the Tai-ho, is the seat of the principal silk manufacture. 3. Ning-po, or Liang-po, has an excellent harbour, and carries on a great trade, particularly in silks, with Batavia, Siam, and Japan; it is, indeed, only two days' sail from Nanga-zaki. Cheu-shan, or Shippy island, about 18 or 20 leagues from Ning-po, is the place where the English ships landed their goods when they first established the trade with China in 1700. 4. Chao-king, on an extensive plain, is famous on account of the sepulchre of Yu the Great, (B. C. 2170,) the most ancient monument which the Chinese possess. The streets are well paved, and lined with piazzas for the protection of the passengers; and the inhabitants are renowned for their knavery. Every great mandarin makes a point of having a secretary from Chao-king-foo.

This province extends from 26½° to 31° N. lat., and its mean temperature in winter is about 60° of Fahrenheit's scale. From the coast to the neighbourhood of the capital, the country is level, with a clayey soil on a bed of potter's earth. The mountainous tract then commences with a reddish sandy surface. This continues for about 60 leagues. On the western side of the province, the mountains extend about 12 leagues with a clayey soil. The remainder of the country is level, all in a high state of cultivation, and extremely populous. Its maritime position, so advantageous for trade, combined with the advantages of soil and climate, render it one of the first provinces in the empire in point of wealth and population; and numerous streams, with canals kept in good repair, give every requisite facility to internal intercourse. Silks, plain and embroidered, are its staple article; and ordinary tissues may be purchased so cheap, that a suit of silk here would cost no more than one of the coarsest woollen in Europe. Whole plains are covered with dwarf mulberry trees for the support of the silk-worms; for which stunted trees are found to be most serviceable. Various kinds of wood, particularly bamboo and tallow-tree, dried and pickled mushrooms, indigo, and super-excellent hams, are among the articles for which this province is famed. The natives are said to

be as courteous and good-humoured as the Chinese usually are, but more superstitious than the rest of their countrymen.

KYANG-SEE.] Kyang-see, which lies between Che-kyang and Kwang-tong, and is itself separated from the sea by those provinces and Fŏ-kyen, has 13 cantons and 78 districts and townships. 1. Its capital, Nan-chang, in 28° 40′ N. and 115° 50′ E., is a place of considerable trade; so much so, that lord Macartney's embassy had reason to believe that there were 100,000 tons of shipping, independently of small craft, lying near it, when they passed through the place. The snakes inhabiting a well belonging to a celebrated temple in this neighbourhood, are a great object of adoration, and, as they usually come to the surface of the water when rain is about to fall, are supposed to possess a prophetic knowledge of future events. 2. Jao-choo is the district to which the village of King-tĕ-ching, famous for its porcelain manufactory, belongs. It is placed on the banks of a fine navigable river, and though ranking merely as a village, is said to have a million of inhabitants. Its furnaces amount to 500; all its fuel and provisions are brought from a distance; a plain indication that the neighbourhood is naked and unproductive. Strangers are not allowed to sleep in the town, in order to prevent depredations. It is there that the most beautiful of all the Chinese porcelain is manufactured. That is consequently the great article of trade at Nan-chang, capital of the province; but M. de Guignes complains of the extravagant prices charged there; and adds, that the shops were neither large nor well-stocked. 3. Lin-kyang, on the Yu-ho, is proverbially desolate; "one hog," say the Chinese, "would feed all its inhabitants for two days:" but the neighbouring hills abound in medicinal herbs, for which the great mart is in one of its subordinate villages. 4. Kang-choo, at the confluence of two rivers, has a bridge formed by 130 boats, connected by iron chains; but two or three in the middle can be removed at pleasure to let vessels pass through. The varnish used in japanning is yielded by a kind of tree, (*Rhus Vernix ?*) found near this place.

Kyang-see lies between the parallels of 24° and 30° N. lat., and in winter has a mean temperature of about 60°. The northern part of it is flat, and full of rivers, lakes, and marshes; the southern districts are mountainous; the soil is in general a red or yellowish sand on a substratum of clay. Rice, and more particularly wheat and sugar, are abundantly produced; but not in sufficient quantities to supply the overflowing population. Their poverty, in the midst of this abundance, makes them thrifty and abstemious; and, though laughed at by their more luxurious neighbours, they easily console themselves by their superior acuteness and industry, and often rise to the highest dignities in the state. Besides the vegetable productions mentioned above, the mountainous districts yield gold, silver, iron, lead, tin, vitriol, alum, and crystal. Tallow, paper, and varnish, are important articles of export, and so, it may be said, are wives; for, as the women of this province have not adopted the absurd custom of crippling their feet, and are of a robust make, they are much employed in field-work; and a Chinese farmer, when he wants a profitable wife, goes and purchases one in Kyang-see.

HOO-KWANG.] Hoo-kwang, on its eastern side contiguous to Kyang-see, is nearly in the centre of the empire, and contains 15 cantons, with 114 districts and townships. It is divided into two parts by the Yang-tse-kyang river, and those parts now constitute two distinct provinces; 1. Hoo-

pi, the northern, and 2. Hoo-nan, the southern. 1. Voo-chang, in 30° 40′ N. 114° 15′ E., the capital of the former, is a place of extensive commerce, situated on the bank of the Yang-tse-kyang. Excellent tea, the produce of its fields, bamboo paper from its forests, and brilliant crystals from its mountains, are among the principal articles which attract the crowds of traders who frequent its ports. 2. Hang-yang, a large city, is only separated by the river from Voo-chang. 3. Chang-sha, (in 28° 20′ N. 111° 55′ E.) capital of the latter, is placed near a large stream communicating with a lake of considerable size. 4. King-choo, at the foot of the north-western mountains, is considered as one of the keys to the southern provinces of the empire.

These provinces lie between the 25th and 33d parallels of N. latitude, have generally a level surface, and are well watered and fertile. They produce abundance of rice and other grains, and are thence often called the granary of the empire. Cotton, paper, crystal, talc, iron, tin, vitriol, and mercury, are among the many valuable articles which they furnish.

SE-CHWEN.] Se-chwen, the next province westwards, extending to the confines of Tibet, has 10 cantons, 16 districts, and 72 townships. It is also traversed by the Yang-tse-kyang, which diffuses fertility and prosperity wherever it passes. 1. Ching-too, in 30° 30′ N. and 103° 55′ E., its principal town, is placed in a delightful spot, on an island formed by the approach of several rivers, and is at no great distance from the western boundary of the empire. It suffered very greatly in the wars with the Tartars in the seventeenth century, and has many fine buildings in ruins, but is still a considerable place, and carries on an extensive trade. 2. But Chong-king, at the confluence of the Kin-sha and Ta-kyang (or Great River) is still more important as a place of trade. It is built on the declivity of a mountain, and enjoys a healthy air. Excellent fish, and trunks made of bamboo basket-work, are the articles for which this place is most celebrated. 3. and 4. Long-ngan and Tong-chuen are two strong fortresses at the opposite extremities of the province; neither of them of much importance, since China has been united with Tartary. The latter is garrisoned by soldiers whose profession is hereditary, like that of the Kahattries in India.

Se-chwen extends from 26° to 33° N. latitude, and is exceeded by few other provinces either in magnitude or valuable commodities. Silk, wine, grain, and fruits, are produced abundantly. It possesses mines of iron, tin, lead, and mercury. Its sugar-canes, amber, loadstone, and lapis lazuli are highly celebrated. Musk, rhubarb, and rock-salt are also among the products of its mountains; which furnish, moreover, a breed of small, but well-formed, active horses.

FO-KYEN.] Fo-kyen, on the eastern coast, between Che-kyang and Kwang-tong, has 9 cantons and 63 townships. 1. Its capital, Fo-choo, in 26° 3′ N., 119° 50′ E., is equally celebrated as a place of great trade and a school of deep learning; but especially on account of its bridge of white stone, with 100 arches, stretching across an arm of the sea. 2. Suen-cheu has two lofty and splendid pyramidical temples, and a bridge more remarkable than the one just mentioned. It is formed of a blackish stone, large slabs of which are supported by parallel rows of pillars formed with angular sides to break the force of the stream. Of these slabs, eighteen yards in length, and all alike in materials and figure, there are 1,000. Stone buttresses, with figures of lions, &c. in relief, strengthen the sides of this bridge, and it is surmounted by the city castle. 3. Yen-ping, surrounded by mountains, itself on a declivity overhanging the Min-ho, is so placed that all the

boats which traverse the province must pass immediately under its walls. 4. Chang-cheu, on a fine river, and not far from the sea, carries on an active trade with the eastern islands, and is much frequented by the Spaniards from Manilla. Near this part of the coast is the small island of Emoy (We-mwi or Hyamen), containing a magnificent temple in honour of Fo, and possessing an excellent harbour. It was much frequented by European traders in the earlier part of the last century. A little farther S. is the group of islands called P'heng-hu, or Pescadores; mere rocks and sand-banks, wholly unproductive, but possessing harbours invaluable to the natives of Formosa who have none.

This province, lying between the Tropic of Cancer and 28° N. lat., is warm but healthy, and in a very flourishing condition. Mountainous, but well wooded and carefully cultivated, it is rendered highly productive and capable of enjoying every advantage of its maritime position. Its inhabitants manufacture almost all the articles for which China is celebrated; and its mountains, besides jewels, contain veins of the precious metals. The working of them is, however, prohibited. Its trade with the Indian Archipelago is very extensive. In the age of the Cheu dynasty (in the middle of the tenth century), it formed a separate state, called Ts'he-min, 'the Seven Barbarians; and a variety of dialects still prevails among its inhabitants.

Opposite to the shores of Fo-kyen is the fine island of T'hai-wan or Formosa (the Beautiful), between the 23d and 27th parallels of N. lat., divided by a chain of mountains into two parts, of which one only has been conquered by the Chinese. The eastern side, which is furthest from the main land, is still in possession of the natives, apparently of Malay origin and quite distinct from their continental neighbours. A rich soil, abundant streams, and a genial climate, would render this island almost a terrestrial paradise, were it not visited by frequent earthquakes, and deficient in wholesome water. Notwithstanding this, it is rich and populous, so that the Chinese think it necessary to garrison it with 10,000 men. T'hai-wan, the capital, which has given its name to the whole island, and is represented as equally remarkable for the splendour of its shops, the regularity of its streets, and the multitudes that crowd them, is protected by a fortress of some strength, erected by the Dutch, and called Zelandia. The harbour is deep and spacious, but accessible only by some narrow and shallow channels. The best anchorage is among the P'heng-hu, or Fisher's Isles *(Ilhas dos Pescadores)*, a small group lying between T'hai-wan and the coast of China. The mountains on the northern and eastern sides of the island are inhabited by indigenous tribes, little civilised, belonging, as it appears, to the two great Polynesian families, the eastern Negroes and the Malays. The latter, if not all, of these mountaineers, depend for their subsistence solely on the chase, and delight as much in tattooing themselves as the South Sea Islanders. Stags abound in the forests, and supply the inhabitants of the more elevated spots with clothing as well as with food. Their religion is a system of idolatry, which appears to be similar to that of those islanders, since they all observe the same remarkable sepulchral rites.

CANTON.] Kwang-tong (Canton), though not the largest, is one of the most important among the southern provinces. It forms the south-western boundary of Fo-kyen, and lies between that province and Tong-king. Kyang-si, Hu-kwang, and Kwang-si, are its boundaries on the N. and W., as is the Chinese sea on the S. and E. It contains ten cities of the first class, among which the principal are Kwang-cheu and Chao-cheu. 1. The

former called by Europeans Canton, in lat. 23° 8′ N., and long. 113° 3′ E., is the capital of the province, and for nearly two centuries has been almost the only place in the empire accessible to Europeans. A fine river, near which it is placed, affords a ready communication with the many canals which convey the produce of the remotest part of the empire to this favoured port. It is formed by the union of three distinct towns, which, when taken together, make up a complete square. One only of these can be entered by Europeans, and that is rather a suburb than a part of the city itself. The city, with its suburbs, is estimated at 20 miles in circumference. The streets, like those of Pe-king, are constantly filled with multitudes, and are generally paved with flag-stones, and adorned at intervals with triumphal arches, but they are usually narrow; that appropriated to the porcelain, which is one of the largest, not being more than nineteen or twenty feet wide. Those which contain the richest shops are roofed over, and might be compared to the bazaars of Western Asia, were not their neatness and splendour such as are never seen under the oppressive rule of Mahommedan despots. The shops of a superior class consist of several apartments in the same line, and opening into each other; the first and outer one is entirely open on the side next the street, and generally contains coarser wares, porcelain, toys, or trinkets, such as are commonly purchased by the Chinese; the second room is filled with fine China-ware calculated to please European customers; the third has an assortment of silks and velvets; and the fourth, if there are more than three, is furnished with tea of different qualities, and such other articles as are in general demand. On great festivals, these contiguous apartments are all thrown open, ornamented with an artificial shrubbery, and lighted up with coloured lanterns, while musicians, stationed in the innermost apartments, form concerts for the amusement of the amusement of the passengers. Besides the residents in the town itself, there is what may be termed a floating population, as innumerable boats, ranged in rows like streets, cover a large portion of the river, and are occupied by families who have no abode on shore.

The population of Canton alone was rated as high as a million and a half by Father Le Comte, which shows what sort of credit his Chinese authorities deserved, since the whole province, according to the official census of the empire, contained little more than two-thirds of that number not half a century before. Sonnerat's estimate of 75,000 seems too low; and perhaps, if all the suburbs are included, 150,000 souls will not be too high a number.

Fo-kan.] About 12 miles from Canton is the village of Fo-Shan, a sort of distant suburb, and one of the largest villages in the world. It is said to be 9 miles in circumference, but consists only of one large street parallel with the direction of the river, and a few shorter at right angles to the former; its trade and population are very great, though like almost every thing else in this singular country, they have been much exaggerated. The number of its inhabitants does not amount probably to half of the million that has been been assigned to it. Macao, at the mouth of the river Ta, on which Canton stands, is a Portuguese settlement on a small neck of land, once a fortress of considerable importance, but now of little value, except as a place of residence for the Europeans engaged in the trade with China, and virtually in their power.

Chao-cheu-fu.] Chao-cheu, the second city in the province, has the double advantage of a productive territory and two navigable streams; but this is counter-balanced by an unhealthy atmosphere, and the prevalence of

contagious disorders during the four last months of the year. A celebrated monastery of the Bonzes 800 or 900 years old, and a peculiar kind of oil extracted from a plant called cha-chu, give a kind of celebrity to this town, the population of which amounting to about 50,000 souls, is supported principally by a manufactory of nankeens.

Lyen-cheu-fu.] Lyen-cheu, separated by impassable mountains from Tung-king, has a good harbour. Most of the other towns in this province are surrounded by a fertile country, and carry on an extensive trade. To the S. a narrow peninsula, which seems to have been originally an isthmus connecting Haï-nan with the main land, stretches out beyond the rest of the coast, and is separated from that island by a strait where there formerly was a pearl fishery. On its northern side Haï-nan is flat and level, but a mass of lofty mountains gradually rises to the S., and is occupied by tribes, which like those of the highlands in Formosa, have maintained their independence in spite of the Chinese. The low country is unhealthy, but extremely productive of indigo, cotton, and rice. The woods afford areca, dragon's blood, and other tropical productions, besides very valuable dying woods used in colouring porcelain; but that most esteemed by the Chinese is called eagle, rose, or violet-wood by the Europeans, and is exclusively reserved for the use of the emperors. The inhabitants of this coast are said to possess the art of compelling the pearl oysters to generate pearls, by introducing a thread strung with beads of mother of pearl into the oyster shells when open and swimming on the surface of the water. Kyen-cheu, the capital, of this island, is placed upon a promontory, so that vessels can anchor close to its walls. This province, including the island of Haï-nan, lies between the 18th and 25th parallels of northern latitude; its climate, therefore, is the hottest of any part of the empire.

For about 90 miles from the sea the river Ta flows through extensive plains; but beyond that limit it has to force its way through bold and elevated mountains abounding in coal and other minerals. The soil, generally of a yellowish hue, but often red, is either clayey or sandy, and besides the ordinary vegetables of these latitudes, produces a very hard kind of timber, called by the Portuguese iron-wood, from its colour as well as weight, which is so great as to prevent it from floating on water. The li-chi, (*Litsæa*) and i-ven also are natives of this part of China; the former is a soft insipid kind of fruit something like an onion; the latter is more refreshing, and has a musky odour. Among the various kinds of poultry reared in this province, ducks, hatched by artificial incubation, may be mentioned; their eggs, moreover, are preserved in a coating of salted clay, and their flesh is prepared in such a manner as to retain its original flavour for a considerable length of time; these arts, it appears, the Chinese owe solely to their own ingenuity. Notwithstanding the level nature of a great part of this province, and its position so near the tropic, its winters are severe, and ice is sometimes formed, though snow is very seldom seen. The inhabitants are healthy, active, and industrious, but remarkable for their insolence and contempt of foreigners.

KWANG-SI.] Kwang-si, the central province on the southern confines of the empire, forms the north-western boundary of Kwang-tong, and the two are often comprehended together under the name of Lyang-kwang. It contains 12 primary, 25 secondary, and 73 towns of the third order. Its northern districts are mountainous, woody, and uncultivated; but on the south, the hills sink into the extensive and fertile plains which furnish Canton with a supply of rice for six months in the year. Its mines, how-

ever, are the most abundant source of its wealth; and tin and copper, but especially gold and silver, are found in large quantities; these treasures are watched with a jealous eye by the government, which prohibits its subjects from working their mines, retaining that privilege as a monopoly in its own hands.

One of the vegetable productions for which this province is celebrated, is a singular tree, from the pitch of which a farinaceous substance is prepared, that serves to make a kind of bread; it is, probably, like the sago, a species of palm. The birds and insects also are very numerous, and none more so than the king-ki, or golden pheasant, (*Phasianus Pictus.*) Though inferior to many others in extent and wealth, this province is one of the most populous in the empire; and the inhabitants of its northern and western districts have a coarseness in their manners, so remote from the polish and ceremoniousness of the other Chinese, that they are considered by their countrymen as little better than barbarians. A better soil and a more extensive traffic have rendered the natives of the eastern part of the province more civilized. The capital Kwei-lin, in lat. 25° 20′ N. and long. 11° 30′ E., on a narrow and rapid river, is a large city, and is celebrated as the place near which the best stones used by the Chinese in making ink are found.

YUN-NAN.] The adjoining province of Yun-nan, on the south-western boundary of China, has 21 first-rate, 25 second-rate, and 30 third-rate towns, and is one of the most opulent in the whole empire. Being mountainous and well-watered, it enjoys a cool and salubrious air, and derives considerable advantages, with respect to foreign commerce, from its vicinity to other States. The precious metals, tin, copper, rubies, and other gems, together with rich marbles, are yielded by its mountains; elephants and horses are brought from its plains and forests, and silks and linens are manufactured by its inhabitants, particularly a kind of satin much valued. Its natives, like most mountaineers, bear an excellent character, and are robust, active, intelligent, and courageous. Yun-nan, its capital, in lat. 25° 5′ N. and long. 103° 15′ E., on the borders of a considerable lake, still possesses many monuments of its former magnificence while the residence of a tributary prince; but it has suffered greatly in various invasions of the neighbouring Tatars. Vu-ting, on the frontiers, is considered as one of the bulwarks of the empire.

The Lo-los, former masters of this country, were not reduced to subjection by the Chinese till after a long series of bloody contests; this gallant defence of their independence secured to them, however, many privileges, which the jealousy of their conquerors makes them very unwilling to grant. They are more like feudal tenants than subjects of an absolute prince, and seem superior in strength and character to the servile Chinese. Their language and religion are said to be the same as those of Pegu and Ava, and their name resembles that of the Laos mentioned by the early Portuguese writers; but these Laos are called Mong-ja by the Pa-pe and Pe-ï, two nations on the borders of Yun-nan. That province they name Mong-che, while they call Ava Mong-nan; and Mong is the proper denomination of the natives of Pegu. The Lo-los, therefore, Laos, and people of Pegu, were probably at some former period all subjects of one great empire, perhaps that called Kalaminham by the Portuguese.

KWEI-CHEU.] The only remaining province of China yet undescribed is Kwei-cheu, confessedly one of the smallest, least cultivated, and least populous. It is enclosed by Yun-nan, Sĕ-chwen, Hu-kwang, and Kwang-si,

and occupies a portion of the mountainous tract which gives rise to the U-keaung and other streams flowing into the Yang-tse-keaung. It has 13 cities and 78 towns of lower rank. Its mountains abound in metals, among which tin, mercury, and copper deserve particularly to be noticed: much of the latter required for the imperial mint, is drawn from this province. The best horses in China are bred here, and a plant resembling hemp, but peculiar to this country, furnishes materials which are well calculated for making light summer clothes. The fastnesses in these mountains are almost inaccessible, and their inhabitants have always defied the attempts of the Chinese to effect their subjugation. The continual warfare in which the governing mandarins are involved, and perhaps the inclement air of these bold and rugged heights, makes an appointment in this province a sort of honourable exile; and there are few things more dreaded at the court of Pe-king, than a commission to serve his imperial majesty in the glens and wilds of this Chinese Siberia. A considerable area, at its south-eastern extremity, is still possessed by the independent Seng-myao-se, who are called a barbarous people by the Chinese. Their country forms one large blank in the great map mentioned above, the geographers of the Central kingdom being either too honest to lay down a country of which they had no knowledge, or too proud to honour the hiding places of such vagabonds with their notice. Kweï-yang, the capital, in lat. 26° 40′ N. and long. 106° 37′ E., once a royal residence, is now a small town scarcely three miles in circuit, but still retains some memorials of its former greatness.

Authorities.] Three Years' Travels from Moscow overland to China, by his excellency E. Ysbrants Ides; translated from the Dutch, 1706, 4to.; Du Halde's Description of China and Chinese Tartary, 1738-41, 2 vols. fol.; Memoires Sur les Chinois, 15 vols., 4to., Paris, 1780, compiled from the papers of the missionaries resident at Peking, subsequent to the expulsion of the Jesuits in 1723; Grosier's Description de la Chiné, 1818, 4 tomes, 8vo.; De Mailla's Histoire Générale de la Chine, 1777-85, 13 vols., 4to.; Bell's Travels to various parts of Asia, 1762, 2 vols., 4to.; Philosophical Dissertations on the Egyptians and Chinese, from the French of De Pauw, 1795, 2 vols. 8vo.; De Guignes' Voyage à Pekin, Osbeck's Voyage to China and the East Indies, translated from the German, 1771, 2 vols., 8vo.; Sir George Staunton's Account of the Embassy to China, 1797, 2 vols., 4to.; Barrow's Travels in China, 1804, 4to.; Ellis's Account of Lord Amherst's Embassy in 1816; Dr Clarke Abel's Personal Observations made during the Progress of the British Embassy to China, 1818, 4to.; Morrison's Horæ Sinicæ, 1812, 8vo., and his Dictionary of the Chinese Language, 1816; Remusat's Grammaire Chinois, and his edition of the Chun Tseu of Confucius; Father Basile de Glemona's Chinese and Latin Dictionary, edited by M. de Guignes.—In addition to these works, the reader is referred to an excellent article on China in the Miscellaneous Division of the Encyclopædia Metropolitana, to which we have been much indebted in drawing out this article, particularly in the topographical details.

PENINSULA OF KOREA.

Extent and Boundaries.] THIS large and extensive peninsula has the sea of Japan on the E.; the gulf of Peking, or the Kang sea on the W.; Mandshooria on the N.; the Chinese sea on the S.; and the province of Lyautong, now called Quangtong, and Fongthyen, on the N.W. Its extent from N. to S. is about 9 degrees, or from 34° to almost 43° N. lat.; and its breadth is from 8° 10′ to 14° E. long. of Peking. Its length from N. to S. is therefore about 620 British miles; and its breadth across the neck where it forms the mainland, nearly 300, and towards the southern extremity 260 miles.[1]

[1] The recent voyage of captains Hall and Maxwell have proved its breadth to be much less than that laid down in the maps of D'Anville and Dr Kæmpfer; as a great part of what was considered the western coast consists of an immense assemblage of small islands occupying a space of 200 miles from N. to S., and 60 from W. to E. Our navigators having landed on one of these islands or rather peaks ascended to its summit, 600 feet above the sea, and found that the mainland was just discernible from it to the east. From this point they endeavoured to count the islands in view lying round them in thick clusters, as far as the eye could reach, but differed in their computation from 120 to 170. When it is considered that the point of view was neither very high nor very centrical, some idea may be formed of the multitude of detached masses, chiefly granite, which compose this immense archipelago. It follows from this new discovered fact that 12,000 square miles at least must now be deducted from the hitherto supposed area of Korea. Even more than this should be deducted, as Basil bay, on the western coast, would be situated, according to our preceding map, 120 miles in the interior of Korea, and the error in longitude of that bay is not less than 2° 14′ or so much too far W. But this immense assemblage of islands, amounting, it is supposed, to upwards of 1000, is a sort of compensation to his Korean majesty, for that portion of his continental dominions which our maps usually gave him, and his title of 'king of ten thousand isles,' is therefore somewhat appropriate. These isles are apparently all inhabited, and cultivated wherever practicable. Few of them exceed 3 or 4 miles in length, and the intervening channels were from 1 to 4 miles in breadth. The women, on perceiving our boats approach the shore, fled with their infant children, and hid themselves in recesses among the rocks; whilst the men, in a body, but unarmed, hallooed to the strangers not to advance, making a signal by drawing their hands across their throats. They afterwards became more friendly, brought them water to drink, and offered them a part of their humble fare; then, as if suddenly recollecting that they were doing wrong in holding intercourse with barbarians, they would lay hold of some of the sailors by the shoulders, and push them away, pointing to the ships. To the S. of these is a small volcanic island about 5 miles in circumference, rising at once from the sea to an elevation of 1,200 feet; on this our voyagers could not land for the tremendous surf which broke on the shore. The sulphureous smell was distinctly felt at the distance of 4 miles; and this island, therefore, they called 'Sulphur island.' When we reflect that the western coast of Korea was never visited or even seen by Europeans, we need not wonder at our former ignorance with respect to it; but we may well wonder at that of the Chinese respecting a peninsula so nigh their own coast, and a dependency of their empire. It was the intention of that great prince, the emperor Kanghee, that Korea as well as Mandshooria should be included in the able and laborious survey of the Chinese empire made by the Jesuits; but from the extreme jealousy of his Korean majesty, and his urgent entreaties that no Christian missionaries should enter his kingdom, the emperor sent in place of them a Tartar mandarin, accompanied by a Chinese doctor of the board of mathematics. This mandarin brought back a map of Korea which he found in the royal palace. He went as far as the capital, and measured by a line the road to it from Fong-whang-ching, the frontier

Historical Remarks.] When or by whom Korea was originally peopled is unknown; but we may presume that the natives are of Tartarian descent, mixed with Chinese refugees, who, at different periods of early Chinese history, successively colonized Korea, and mingled with the aboriginal natives. All that is known of Korean history is from the Chinese annals; and from these it would seem that Korea was anciently inhabited by various nomadic tribes, who came from what is now called Mandshooria to the N. of Korea. Korea has been successively conquered by Japanese, Mandshoors, Mongols, Chinese, and finally by the present dynasty which fills the Chinese throne. It was twice conquered by the Japanese, in the year 200 after Christ, and in 1592 by the famed Taycho the secular emperor of Japan. But his death prevented the complete conquest, and the Koreans, assisted by the Chinese, drove out all the Japanese garrisons, except those of the S.E. part called Tsiot-Sijn, which the Japanese still retained in 1693 while Kæmpfer was at Japan. According to some modern accounts it is still subject to that power; but M. Krusenstern is of opinion that the Japanese sovereignty is confined to the small island of Tsoo-Tsima, in the strait of Korea, between it and the island of Kiu-Siu, and which was formerly subject to Korea.

Name, &c.] Korea is called by its inhabitants, says Hamel, *T' -cen-koak;* by the Mandshoors *Solko* and *Solko-Kuron*, 'the kingdom of Solko;' and by the Chinese *Kaulee-que*, or 'the kingdom of Kaulee;' and in modern times its official name is *Chaosyen*,—a name derived from two dynasties which once reigned in this country. Not above one-third of its meridional extent belongs to what is properly called the peninsula. On the N.W. side it was parted from Lyautong by a strong wall not much inferior to that of China, but some part of it was in a great measure destroyed by the Mandshoors in their irruptions into that peninsula which was one of their first conquests. The rest, on the side of Mandshooria, was still standing and almost entire till about a century and a half ago, since which it has been gradually going to ruin. However, there is no getting into Korea, whether from Tartary or China, without the imperial permission.

Divisions.] Korea contains at present 8 provinces (for it has been differently divided at different times) which contain in all 40 *kyun* or great cities, 33 *foos* or cities of the first rank, 58 *choos* or cities of the second rank, and 70 *heen* or cities of the third rank, besides a vast number of fortresses and castles dispersed in most parts of the country, and chiefly built on hills, all well garrisoned by a proportionable number of officers and soldiers. Hamel, in his day, says that it contained 360 cities and towns besides hill forts. The chief province is *King-hee*, or 'province of the court,' which lies in the centre. E. of it is the province of *Keeaung-*

city of Lyautong on the side of Korea, in 40° 30′ 20″ N. lat., and 7° 42′ E., by astronomical observation. As we had no opportunity, says father Regis, a Jesuit missionary, and one of those employed in the triangulation of the empire, of viewing either the sea coast or interior of Korea, whereby we might accurately fix their situations, we do not pretend that the map is complete, but only the best that could be got. The whole of the northern limits are accurately defined, as well as those on the side of Lyautong, and the several latitudes fixed by observation. But as to the peninsula itself, except the capital, whose site has been satisfactorily fixed, no observations whether of latitude or longitude were made either in the interior or on any parts of the coasts. The above being the true state of facts respecting the geography of Korea, it may well be imagined that very little satisfactory can be said on this subject, as no Europeans have ever been there except Hendrick Hamel, clerk to a Dutch ship which was cast away in 1653, on the island of Quelpaert, about 12 leagues S. of the peninsula, and he, with the rest of the crew, detained for 13 years in different parts of the country.

ywen, or 'source of the river,' or 'the country of springs,' which was anciently the country of the Me's. The 3d, called *Chao-sien*, lies to the W. of King-hee, and was the country of the ancient Mahaus. The 4th, or northern province, is *Ping-an*, or 'the pacific.' The 5th, or *Swenlo*, is the southern province, and was the country of the Pyen-haus. *Chusin* on the S.W. side is the 6th province. The 7th, or N.E. province, is the ancient country of the Kau-keeoulee; and the 8th province on the S.E. side is *King-shan*, formerly the seat of the Cheeou-haus.

Mountains.] The only well-known physical feature of the geography of Korea is a high range of mountains running from N. to S., and seemingly connected with the Mandshoorian mountains. This long chain is called *Chim-Tai*, and, when it enters the peninsula, skirts its eastern side, on the shore of the Japanese sea. Its medium altitude is estimated at 4,480 French, or 4,776 English feet. The general inclination of the land is to the W. or to the Yellow sea. The coasts and adjoining islands are said to be rocky and difficult of access. On the W. side, however, Basil bay is a safe and extensive harbour; and amongst the numberless islands off the coast there are bays and harbours in which all the navies of the world might ride in perfect security.

Rivers.] There are but two rivers of note known to Europeans in this region,—the *Yaloo-Keaung*, and the *Toomen-Keaung*, as they are called by the Chinese, or by the Mandshoors *Yaloo-Oola*, and *Toomen-Oola*, these terms denoting, in Mandshoorian and Chinese, 'a river.' These two streams originate in the great snowy mountain which runs alongst the N. of Korea, and which is called by the Chinese *Chang-pe-shan*, and by the Mandshoors *Amba-Shanggan Alin*, 'the ever white mountain,' and *Gooliman Shanggan Alin*, 'the great white mountain.' These rivers run in opposite directions, the Toomen to the E. and the Yaloo to the W., the former falling into the Yellow sea, and the latter into the sea of Japan. They are both large, deep, and rapid streams. Of the streams watering the peninsular part we have no account, though several of them, as depicted on the map of Korea, must be considerable.

Climate.] In the northern or continental part the cold is long and severe, though it lies in the latitude of Italy. The snow falls here in such quantities as often renders it necessary for the inhabitants to dig passages under it, in order to go from one house to another, and such as travel over the snow wear boards under their shoes to prevent them from sinking. Even in the peninsula itself, the frost, says Hamel, is so severe by the end of November at King-kee-tao the capital—where he resided as a prisoner—in 37° 38′ N. lat., that the river was frozen across, and 300 loaded horses passed over it. This excessive cold is attempted to be accounted for by the mountainous nature of the country, and the vicinity of the great Mandshoorian range, which forms its northern frontier. It is, however, a fact, that the cold increases progressively towards the East in the Asiatic continent.

Productions.] Of minerals, Korea is said to possess gold, silver, lead, iron, topazes, and rock-salt. The mountains in the north are covered with vast forests; and the soil of the peninsula is said to be fertile and well cultivated, and to produce abundance of wheat and rice, with fruits of all sorts, and two annual harvests. But this is only predicable of the southern provinces; for in the continental part the soil is barren, woody, and mountainous, full of wild animals, and but thinly inhabited. There no other grain but barley is produced, which is made into a coarse bread by the inhabitants. Yet we are told by the missionaries, that the Koreans,

like their Chinese neighbours, cultivate the hills to the very top, and cut them into terraces. In the southern parts, besides abundance of every species of agricultural and horticultural produce, large breeds of great and small cattle are reared. Domestic fowls, wild fowl, and every species of game, abound,—as sables in the northern parts, martins, beavers, deer, wild boars and bears. Reptiles are also said to abound in the south; and in the rivers that dangerous amphibious reptile, the *kaiman*, is frequent,—some of them, according to Hamel, from 30 to 40 feet in length. The pheasant is a native of the peninsula of Korea; and the inhabitants have a species of small riding ponies, not above three feet high. The northern provinces of Korea produce that far but over-famed root, the *jinseng*. Silk, flax, cotton, and other commodities of that kind, are produced in the peninsula. As they are ignorant of silk-weaving, the wool is exported to China and Japan. According to one Chinese statistical account, tea is produced, but such a fact is not mentioned in other Chinese accounts. It may be produced in the southern part, but in the central and continental provinces the climate is certainly too cold to admit of its growth; and Hamel, who was so long there, is entirely silent upon this point, yet he could hardly have failed of knowing or hearing of it if such was the fact, and tea is not produced in China farther N. than 37° 48′, in the province of Shantong. The oxen in Korea are used for ploughing, and the horses for carriage.

Manufactures and Commerce.] Of these almost nothing is known. The natives are said to make a very white and strong paper from cotton. They also make fans, and painted paper for ornamenting rooms, and very fine linen. They carry on a small commerce with China and Japan.

Miscellaneous Remarks.] The Koreans are represented as a stout, well-made people, of agreeable aspect and polished manners,—and in religion, manners, and customs, bearing a great similarity to the Chinese, with whom, from time immemorial, they have been politically connected. Like them, the Korean government is extremely jealous of all foreigners, and will not allow them to have any intercourse with the natives. Even the Chinese envoys, who are sent to Korea, are kept under strict surveillance. This extreme caution respecting foreigners was exercised towards our navigators, captains Hall and Maxwell. With every disposition to be kind and friendly to them, they were obviously under the influence of terror, lest, by permitting any communication with the people on shore, their heads should be endangered. Their towns are much like those of the Chinese; but the houses are principally built of mud, without art, and destitute of convenience, and in some places are raised on stakes. The houses of the nobility have more external show, and are surrounded with extensive gardens. It appears, from Hamel, that the nobles exercise in their respective districts a very oppressive feudal power, allowing no houses but their own to be roofed with tiles, the people being obliged to live under thatched roofs. The Korean government has always been monarchical and despotic, and the monarch is the sole hereditary landed proprietor, as all the lands hold of the crown, and there is no such thing as a landed aristocracy or hereditary nobility. At the demise of the possessor, they revert to the crown. The nobles are, of course, entirely dependent on the king for their landsand places. The royal revenue is one-tenth of the agricultural produce, and some duties levied on imports and exports. All the inhabitants are bound to work three months for the sovereign on the royal domains, which are very large; and once in seven years all the free men able to bear arms are sent from every province to do duty at the court for two months, ac-

cording to Hamel. Though the Korean king is only one of the numerous vassals of the Chinese empire, yet in his own dominions he has a splendid and numerous court, and a well-furnished harem; and the Chinese court never intermeddles with his internal administration, provided he be punctual in paying his annual tribute by his ambassador, and doing homage, by performing the nine prostrations and knockings of the head before the celestial presence. Whenever the monarch dies, two grandees are sent from Peking to confer upon his successor the title of *Qui-vang*, or king, who receives the investiture kneeling, and makes the specified presents, besides 8000 taels in money. The Korean crown does not descend by right of primogeniture—for such a right is not known in Asiatic monarchies—but to such of his sons as the king may think fit to appoint as heir apparent; and the nomination is confirmed by the court of Peking. When the emperor sends an embassy to Korea, the king is obliged to go in person with all his guards to receive him, at a distance from his capital; whilst, on the other hand, those of the Korean prince to the celestial court are scarce received with any ceremony, and are even obliged to give precedence to a mandarin of the first rank.

There are two languages in Korea, the Chinese or foreign, and the Korean or vernacular. The former is confined to the literati, who, as in China, form a distinct order in the state, and are distinguished by two feathers stuck in their caps. They undergo many examinations, as in China, but their learning seems confined to the philosophy of Confucius. The vernacular language is wholly different, and, like that of the Mandshoors, has a peculiar alphabet, which was probably introduced at an early period by the priests of Buddha or Fo. They write with pencils made of wolf's hair, and print their books with wooden blocks. The Korean language is too little known to enable us to say any thing satisfactory about it. It contains some Chinese and Mandshoorian words, as might be expected; but the greater part of it belongs to neither, and is accordingly ranked by Klaproth, in his polyglot table of Asia, as a distinct language of itself, the cultivation and elucidation of which is left for some future traveller, who may have the good fortune to explore this all but unknown region. Whatever of learning exists in Korea is of Chinese origin, and is confined to the few who have embraced the system of Confucius. Buddhism is the prevailing idolatrous system of doctrine and worship in Korea; and the bonzes are numerous over all the country, and have many temples and monasteries, mostly upon the sides of hills, and some of them containing from 400 to 600 monks. Many of them, like the Tibetian lamas, have their heads shaved, abstain from animal food, and avoid the sight of women.

The army is numerous, but would not be formidable to Europeans, and is furnished with bad muskets. Their ships of war are superior to those of China, and seemingly imitations of the Portuguese galleys; they are mounted with small cannons, and furnished with fire-pots.

Population.] The number of inhabitants is unknown, and whether the population is proportioned to the extent of the country, we have no means of determining. We are told by the Chinese historians, that in the reign of Kautsong, of the Tang dynasty, who conquered Korea in the middle of the 8th century, it then contained 170 principal cities, and 690,000 families. This, supposing five to a family, would make a total of more than 3,000,000, which is but a small number for a region whose surface is equal to one-half that of Asia Minor.

CHINESE TARTARY.

THIS vast region contains upwards of 4,000,000 of British square miles; and is composed of two distinct, but very unequal divisions: *Central Asia*, and *Mandshooria*, or *Eastern Chinese Tartary*. Having just finished our description of Korea, order requires that, in describing Chinese Tartary, we commence with Mandshooria, which lies to the N. and N.W. of Korea.

I. MANDSHOORIA, OR EASTERN TARTARY.

THE former of the above appellations is derived from the Mandshoors, its inhabitants, and the latter from its relative situation in respect of Mongolia. This extensive region is bounded by Mongolia on the W., and Russian Daouria on the N.W.; by the Eastern ocean on the E.; by Eastern Siberia on the N.; and by the sea of Japan, the kingdom of Korea, and the gulf of Lyau-tong, or 'the Yellow sea,' on the S. It extends from the 118½ deg. to the 142d deg. of long.; and from the southern point of Lyau-tong, in 40° N. lat. to 55° N. lat. Its greatest extent from W. to E. therefore is about 1100 British miles; and its greatest breadth 900 geographical or 1045 British miles; but its general breadth is from 12 to 13 degrees, or from 800 to 870 British miles. The superficial area is above 800,000 British square miles.

Divisions.] Mandshooria, according to Du Halde, is divided into three governments: *Shin-yang*, or *Mookden*, *Kirin-oola*, and *Tsitsicar*. The first comprehends the S.W. part, or the ancient Lyau-tong,—the second the S.E.—and the third the N.W. part of Mandshooria Proper. Of these divisions, that of Shin-yang is the smallest but best peopled, and nighest China; the second is the most extensive and the most remote. By others it is divided into the two *foos* or sub-governments of *Shin-yang*, or *Fongt-hyen*, on the Yellow sea, and *Mandshooria Proper* on the Amoor and sea of Japan.

CHAP. I.—PHYSICAL FEATURES—CLIMATE—PRODUCTIONS.

THIS region being very imperfectly known, and never visited but by the Jesuits employed by Kaunghee to make a map of it, very little can be said respecting its external aspect. As far as can be judged from the map, its appearance is much diversified with mountains, hills, plains, and forests, and altogether different from Mongolia, being exceedingly well watered, and free from those sandy deserts which occupy so large a space in Central Asia. In the eastern part of Lyau-tong, and on the frontiers of

Korea, the country is represented as full of bogs and marshes; and towards the N.E. of the province of Kirin-oola, it is overrun with extensive and impenetrable forests, which increase in magnitude and density the nearer they approach the sea: so much so indeed, that, unless on the immediate banks of the Amoor, which is thickly planted with Tartar villages, the whole country seems one continuous and uninhabited forest. After passing through these immense forests, fine green valleys occur, which are watered by beautiful and transparent rivulets, whose banks are enamelled with the flowers common in Europe.[1]

Mountains.] Mandshooria Proper is bounded on the W., N., and S., by great mountain-ranges, which separate it from Mongolia, Lyau-tong, Russia, and Korea. The chain which bounds it on the W. is called the *Siolki* mountains. These may be denominated the eastern buttress of Central Asia. This range strikes off to the S. from the *Yablonnoi*, or 'Apple mountains,' and runs towards China, crossing the rivers Schilka and Argoon in its progress, and extending as far as the wall of China. This lateral chain is more than 1000 British miles in length, and of great elevation. The central ridge is generally called *Mount Pecho* by the Chinese, and *Hamar Tabahan* by the Mandshoors. It divides the waters of Mandshooria, Pechilee, and Lyau-tong, from those of Mongolia, which descend to the Argoon. The elevation of Mount Pecho is estimated by father Verbiest at 16,000 feet above the sea; and by another estimate, given by father Gerbillon, at 9 Chinese lys, or 17,820 feet above the level of Pechilee. The ascent cost Verbiest six days' journey, as he tells us; and its summit is covered with perpetual ice and snow. Gerbillon, who travelled alongst its foot in October, saw ice an inch thick in three small ponds, between two of the lowest eminences in its vicinity, and in the brooks that descended from the ridge. The descent is much greater on the side towards Mandshooria than on that towards Mongolia.

The southern range is a south eastern prolongation of the Siolki mountains, and runs E. along the frontiers of Lyau-tong, and Korea, and thence N.E. towards the sea of Tartary. In other words, it forms the southern border of the basin of the Amoor. To the N. of Shin-yang, or Mookden, it is called *Kinshan* by the Chinese, or 'the Golden mountain;' and to the N. of Korea its principal summit is called *Amba Shanggan Alin*, or 'the ever white mountain;' *Gooliman Shanggan Alin* by the Mandshoors, or 'the great white mountain;' and *Shan-pe-Shan* by the Chinese, from the perpetual snow which invests its sides and summit. It is the highest mountain in all Mandshooria, and is visible to a vast distance. The lower part is covered with wood.[2] The Chinese say that this

[1] The emperor Kienlung, in his *Eloge de Mookdin*, a poem in praise of the country of his ancestors, describes it as a country of 10,000 *ly*, having a succession of hills and valleys, parched lands, and others well-watered, majestic rivers, impetuous torrents, graceful serpentine streams, smiling plains, and forests impenetrable to the solar rays. But these fine epithets give us very little real knowledge of the country.

[2] In 1677, a person, named Oomoona, was despatched from Peking by the emperor Khanghee to visit it, and bring back an account of it, and also to offer an animal sacrifice to the protecting spirits of the mountain. After a laborious journey, he states, he at length arrived near its base, but found it covered with clouds and mist, so as to be invisible. He then invoked the genii of the mountain, and scarce was his prayer begun, when the mist disappeared, and the mountain appeared in all its glory, and he beheld the path which led up to it. The ascent, at first easy, gradually became very difficult. They walked constantly upon snow covered with a crust of ice, which apparently had lain from year to year without melting. When they attained the summit, they discovered a platform surrounded by five very high pinnacles, between which was a lake of water about 40 ly in circumference. The summits of four of these pinnacles

mountain gives birth to four rivers: the Songora to the N., the Yaloo to the E., the Se-hoo-oola to the S., and the Toomen-oola to the W. But that this is a mistake, is visible on a bare inspection of the map, where, though it be true that the Soonggaree does originate on its northern side, the others merely issue from the range in which this mountain is situated, not from it itself.

The third range is the *Yablonnoi,* which is just a N.E. prolongation of the Great Altaian chain, from the S.W. of the Baikal-noor, and which separates the basin of the Amoor from that of the Lena. From this range, several lateral ranges are detached S.W. to the Amoor, as the *Hinkan Alin,* and others; but nothing is known of their nature, elevation, and extent. A lateral chain from the southern range separates Korea on the N.W. from *Lyau-tong,* called *Fong-whan-Shang,* or 'the mountains of Fong-whang.' It is of great elevation, as the Chinese authors, in their hyperbolical style, tell us, that in the expedition against the Japanese in Korea, their horses sweated blood in crossing that chain, which forms the N.W. boundary of the basin of the Toomen-oola, or 'green river.'—In the western part of Lyau-tong is a great mountain-ridge, called *Eeaungpee,* one end of which lies close to the commencement of the great wall, and which extends itself quite into Mongolia. It is of great elevation, and has a lake 80 ly in circuit, and of prodigious depth, upon it.

RIVERS.] A region so environed with mountains cannot fail to have many rivers. These do not flow on an elevated plain, and lose themselves in sands, or inland lakes, as those of Mongolia, but flow into the sea, or into the Amoor, which is the great tunnel which conveys them to the Eastern ocean. Besides the Amoor, the chief rivers are the *Soonggaree, Nonnee, Oosooree, Sweefond, Toomen, Yaloo, Lyau,* and others, too numerous even to mention, much less to describe.

The Amoor.] The Amoor rises in Mongolia in N. lat. 48° 52′, and 8 deg. W. of the meridian of Peking; or in 108° 27′ E. of Greenwich observatory, in Mount Kentey or Kinhau, called Kinggan Aleen by Klaproth. It is there called the *Onon.* After a course of more than 200 British miles E. and N.E., it enters Russian Daouria, where, after running in the same direction, and receiving a multitude of mountain-streams from the N.W. side of the Kinhan, it receives the *Ingoda,* a stream nearly equal to itself, and originating 330 miles to the S.W., from the N.E. side of the snowy range of Soohonda, which gives birth on its N.W. side to the *Shikoi,* a tributary of the Selenga, and on its S.W. side to a number of torrents descending to the Onon. The confluent stream runs N.E. to Nerchinsky, the capital of Russian Daouria, in 51° 49′ N. lat., and 0° 45′ E. of the meridian of Peking. Here it equals the Rhine in size, being 660 yards wide, and very deep. Running still N.E., after a further course of 170 miles, it receives, in 52° 40′ N. lat., and 4° E. of Peking, from the S.W., the powerful stream of the *Argoon,* which forms the Russian boundary to the S. of the Amoor, as far up as the Kulon-noor. Strictly speaking, the Argoon may justly be denominated the twin-sister of the Amoor, being its great southern branch, rising under the name of the *Kerlon,* on the S. side of mount Kentey, 7° 30′ W. of Peking, and 48° 35′

declined so much, that they seemed in the act of falling; the fifth or southern pinnacle was straight and lower than the others, and its base assumed the appearance of a gate. From several parts of the mountain, springs and rivulets were seen gushing forth, flowing to the left to the Soonggaree-oold, and to the Great and Little Neien on the right.

N. lat. 40 miles to the S.E. of the Onon Sekim, or 'source of the Onon.' After running in a direct course 500 British miles, (and more than 600 by the windings,) and watering the richest pastures in Mongolia, it enters the lake of Kulon, and passing through it, subsequently receives the name of the Argoon, and joins the Amoor after a further course of 300 miles, and receiving a host of minor streams from the great range of Siolki, particularly the *Kalka*, which gives name to the Kalkas, a powerful Mongolian tribe. Thirty miles below this confluence, the united stream receives on the N. side the *Ajighe Kerbechi*, or *Gorbitza*, from the Yablonnoi mountains, a river which forms on that side the Russian boundary. After a further course of 80 British miles almost due E. in 53° N. lat., it changes its line of direction, running thence 630 British miles S.E. as far as 48° N. lat., where it receives the great river *Soonggaree* from the S.W., a deep and navigable stream. Thence it changes its course again to the N.E., receiving the *Oosooree* from the S., after a course of 320 British miles, a large and transparent stream, and the *Hata Hala* from the Hinkan Alin, a stream of equal size, with a multitude of minor streams on either side. Fifteen miles above the city of Saghalin-oola Hotun, in N. lat. 50° and E. long. 128°, it receives the large stream of the *Chikiri*, called *Zia* by the Russians, which rises in 55° N. lat. in the Yablounoi range, which separates the basin of the Amoor from that of the Lena. This stream receives a multitude of others, both from the Yablonnoi and the Hinkan Alin, particularly the *Tsilimpri*, and has a S.W. course of more than 100 British miles. It is more than a mile and a half broad at its confluence with the Amoor, and so rapid, that it requires more than two months to ascend it, though it may be descended in 15 days in a boat. The Amoor, after receiving a multitude of other streams, finally enters a large gulf formed by its mouth, in 53° N. lat. and 142° E. long., opposite the N.W. end of the island of Tchoka or Sagalian, by a channel 3 leagues wide, and very deep and rapid. The length of its course, including sinuosities, is estimated at 2280 miles, and its average discharge of water per second at 298,800 cubical feet. Its basin contains a surface of 900,000 British square miles, and the river is navigable as far up as Nerchinsky, a distance of 1500 British miles, for vessels of large burden. Its mouth is concealed by a vast number of aquatic plants, but the channel, deep and still, presents no impediments to navigation, having neither rocks nor shallows, and its banks are lined with magnificent forests.[1]—The *Swifond Pira* falls into the sea of Japan, and is a considerable stream.—The *Toomen* and *Yaloo* have been noticed in our account of Korea.—The *Lyau* is a large stream, originating in the Siolki range, in 43° N. lat. and 0° 45′ E. of Peking., under the name of *Sira Mooren*. After running 7° E., it turns to the S.W., and entering Lyau-tong, where it obtains the name of Lyau, it runs quite through that province, and then falls into the Yellow sea after a comparative course of 500 miles. It is not, strictly speaking, a Mandshoorian river; but as the province of Lyau-tong has, since the conquest of China, been incorporated into the government of Mandshooria, the Lyau is now politically a Mandshoorian stream.

Climate.] Though this extensive region is the eastern declivity of the great upland plateau of Mongolia, and consequently on a much lower level

[3] This river is called *Onon* and *Schilka* in the early part of its course. By the Russians it is called the *Amoor* after its junction with the Argoon, and *Schilka* after its junction with the Ingoda. By the Tongousians and Mandshoors it is called *Saghalien Oola*, 'the black river;' and by the Chinese *Helong Keaung*, 'the dragon river.'

than the former, yet the climate is remarkably severe. The trees and plants of temperate climates begin again to appear, and to salute the eye of the weary traveller who has traversed the elevated treeless wastes of the central plateau. Yet the high elevation of the mountains, which on three sides environ Mandshooria, and of the transverse range of the Hinkan to the N. of the Amoor, together with the immense forests which cover the country, counteract the influence of the solar rays. Though under the same latitude with France and Italy, yet the vast southern mountains between Korea and the river Amoor have very long and rigorous winters, as they are covered with glaciers. A still greater mass of snowy mountains forms the northern border of its basin, and the sea which encircles its eastern coast is covered with perpetual fogs. Another cause of the severity of the climate may perhaps be owing to the want of inhabitants and cultivation to clear the ground of those immense primeval forests which cover its surface, so that the soil is never heated by solar influence. On the whole of the eastern coast there is frost and snow in the middle of September.[1] It must also be remarked, that immediately to the E. of China and gulf of Lyau-tong, the Asiatic continent gradually contracts in breadth to Behring's straits. There is no mass of heated land to the S. to communicate to it a part of its caloric, and react upon the temperate mass of air, and by dilating it, force it towards the N., and thus confine the cold. If we consider the mountains that encircle it, the immense forests that overspread it, and the cold fogs that for ever envelope its coasts,—and likewise, that, from whatever quarter the wind may blow, it must necessarily be sharp and piercing, or cold and humid,—we need not wonder, from the physical circumstances just enumerated, that the temperature of this extensive region should be so much below the standard even of Scotland, and so much like that of Lower Canada. The Jesuit missionaries being at Tondon Kajan, the first village of the Ketching Tartars on the Amoor, in N. lat. 49° 24′, on the 8th of September, were compelled to put on clothes lined with sheep skins. They were afraid also that the river, though so deep and wide, would be frozen over, as indeed it was every morning to a considerable distance from the shore.

Soil and Productions.] In such an extensive region there must necessarily be a great diversity of soil and produce. The province of Lyau-tong, or government of Mookdin, is well-cultivated, and the soil good, producing abundance of wheat, millet, and cotton. A great extent of pasture lands in this province renders it of much utility to China, where these are scarce, as a vast number of sheep, cows, and oxen, are there grazed, which animals are by no means abundant in China. Wheat, we are told by the emperor Kien-long, in his *eloge* already noticed, here produces 100 fold. Southernwood and mugwort would cover all the fields; but, from the general cultivation, are found only in the deserts. Amongst the trees of this country, Kien-long mentions the pine, the cypress, the acacia, the willow, the apricot, the peach, and the mulberry. In the vicinity of Ningoota, in the government of Kirin Oola, oats are so abundant, that they are given to horses, as in our country, instead of black beans, common to all the northern provinces of China. Abundance of a species of millet, called *maysimi* by the Chinese, is raised. Wheat and rice are scarce; and father Regis is astonished, that in districts situated in 43° 44′ and 45° of latitude—the latitudes of the south of France—the pro-

[1] La Perouse found the coasts of this country, under 40° N. lat., covered with snow in August

ductions of the soil should be so scanty and limited in kind, as to be behind the northern provinces of France. He imputes its barrenness to the nitrous quality of the soil. But had he taken into account the other circumstances which modify climate so much, he would have found, what is now a recognised fact by all who have studied the climates of the globe, that the climate of a country is not regulated by the sole circumstance of latitude, but by other causes, both physical and moral. Perouse, who examined the S.E. coast and the mouth of the Amoor, says that the country seemed almost a desert. On every hand a luxuriant vegetation reminded the French sailors of the dear country they had left, and which they were never more to revisit. The lofty mountains were adorned with the spreading branches of the oak and the verdant pyramidal forms of the pine. In the lower grounds the willows drank the moisture of the rivers; the birches, the maples, and the medlar-trees, rustled in the winds; the lily, the rose, and the convallaria, perfumed the meadow. The spring was that of Europe; the flora nearly that of France. But there was no trace of the slightest cultivation,—no proof that these shores had ever been inhabited by human beings,—no paths but those of the bear and the stag were formed across the rank herbage nearly four feet high. A single grave and some fishing utensils seemed to indicate that some wandering tribe came occasionally from the interior to give a momentary disturbance to the fishes which swarmed at the mouths of the rivers.[5] Every stream that swells the volumes of the Amoor swarms with fish of every kind; and these serve the poor natives both for food and raiment. The Yupi Tartars, a tribe of fishers so called by the Chinese, spend all the summer in fishing. One part of what they catch is laid up to make oil for their lamps; another serves them for daily food; and the rest, which they dry in the sun without salting—for of salt they are destitute—is reserved for winter provision, whereof both men and cattle eat when the rivers are frozen. That valuable fish, the sturgeon, abounds in the Oosooree and Amoor. The Yupi call it the king of fish. They commonly spear the larger fish and take the lesser with nets. These Yupi know nothing of agriculture, and sow nothing but a little tobacco in a few plats of ground near each village on the banks of the river. All the rest of the land is covered with dense impenetrable woods, from whence they are annoyed with myriads

[5] It is strange (remarks Malte Brun very justly) to find a region so highly susceptible of cultivation in the state of an absolute desert, at the very gates of the ancient empire of China, in which the reported redundance of the population often proves the cause of famine, with all its attendant horrors. We may add, that it is indeed strange that this should be the case, when, if we can believe a late Canton register, the population of China was above 300 millions in 1793, and that the emperor Kien-long said he looked with great anxiety for the future, for the land did not increase, although the mouths fed by it did, and therefore exhorted his numerous subjects to use all possible economy in the use of their food, to ward off the impending danger of a population beyond the means of subsistence. Nothing is needed, one would suppose, but emigration to and colonization of such a vast region, consigned to bears and foxes as an undisturbed settlement. Nothing would be required for that government but to supply the means of emigrating, and enable the colonists to clear the vast forests and cultivate a soil so well watered, and render Mandshooria another Germany; for Germany, in the days of Cæsar, was just what Mandshooria is at present—a country of vast forests, and peopled by tribes of nomade hunters. Such a remedy, with such a country as it were at the very door, would prove a sure resource in the case of a redundant population and scarcity of food, and, by acting as a constant drain, keep the former down to the level of subsistence. The bare fact, that such an extensive region has been, and still is, consigned as a mere hunting country for a few nomade tribes, instead of being tenanted and cultivated by an industrious peasantry, is a clear and cogent proof of the ignorance of the Chinese government, and that the beams of the celestial presence have never irradiated the atmosphere of Mandshooria, nor dispelled the fogs of Eastern Tartary.

of gnats and other insects, which they are compelled to drive away with smoke. Beyond the Saghalien to the N., are nothing but forests frequented by sable-hunters. The N.W. portion of this region, comprehended in the government of Tsitsicar, is in a similar state of non-cultivation, though, here and there a few spots cultivated by the Tagouris or Daourians, an agricultural tribe of Mandshoors who dwell to the N.W. of Tsitsicar, and by the Solons, another tribe of the same stock who are both hunters and agriculturists. The Tagouris raise barley, oats, and millet, selling to the people of Tsitsicar their surplus produce. They breed cattle, such as horses, dromedaries, bulls, cows, and sheep. These last are very fine and large, their tails being above a span thick and two long, are all fat, and so very heavy that they cannot go fast. The Tagouris make great use of oxen to ride on, and are very expert archers, and their bows being esteemed the best in all Tartary, bear a high price. The soil in the vicinity of Tsitsicar and Merghen is sandy and poor, but that in the neighbourhood of Saghalien Oola Hotun yields fine crops of wheat, and at Tsitsicar, the Solons have very rich manured lands, all sorts of garden fruits, and several plantations of tobacco, which is the article of their subsistence.

Mandshooria also produces copper, iron, jasper, pearls and furs, and its mother of pearl is of admirable quality. The pearls are found in the Song-pira, the Korsin-pira, and other streams which fall into the Amoor, and other rivers which descend to the Nonnee and Songgaree, as the Arom and Nemer in the road from Tsitsicar to Merghen. These pearls are got without much art, and are obtained by plungers who take up the first oyster they find, and though much cried up by the Mandshoors, these pearls would be little valued by Europeans, from their defects in shape and colour. These plungers, who form 8 companies, are bound to furnish the Bogdo Khan or Great Khan, as they call the emperor of China, with 1,104 fine pearls annually. But the furs form the most valuable part of Mandshoorian commerce. The Han Halas, and the Solon Mandshoors are the most expert in hunting the furred animals, as sable ermines, black foxes, and martins in the vast forests beyond the Amoor, and on the banks of the Chikiri. The Russians were masters of all these forests, previous to the peace of Nerchinsky in 1689, and had built a fortress named Albazen or Yaksa, on the northern bank of the Amoor, a few days' journey above Saghalien Oola Hotun, in order to protect and ingross the fur trade. By that treaty, they were compelled to demolish and abandon that fortified hunting station, and leave the Chinesian Mandshoors in full and undisturbed possession of these forests, and of the fur trade. The Mandshoors still keep a strong garrison on the frontiers in case of Russian encroachment, and armed barks on the Amoor. The hunters are clad in short jackets of wolves' skins, with a cap of the same, and their bows at their backs. They have horses laden with millet, and their long cloaks of tiger or fox-skins to protect from the cold, especially of the night. They have excellent dogs trained for the game, who clamber well and are acquainted with the wilds of the sables. Neither the severity of the weather, nor the fierceness of the tiger can restrain them from the chase, as all their riches depend on it. The finest furs are reserved for the emperor, who pays a fixed price. The rest bear a great price, even in Mandshooria itself, as being very fine and scarce, and are immediately bought up by the mandarins in these quarters and the merchants of Tsitsicar. The jinsing so much extolled by the Chinese, and which usually sold at Peking for seven times its weight in silver, is now well known to be a production of

Canada and the United States, and the Americans are in the habit of exporting it to Canton, so that its price is much fallen. This plant supposed for long to be peculiar to Mandshooria, grows only on the declivity of wooded mountains, on the banks of deep rivers, or about steep rocks. It can neither bear much cold nor heat, for it does not grow beyond 47° N. lat.

CHAP. II.—INHABITANTS AND POPULATION.

THE terms *Tartar* and *Tartary* have been so long, though erroneously, applied to all the nomadic tribes and regions of Asia, by writers of all classes and every country in Europe, that it is now become impossible to eradicate them from our ethnographical nomenclature, so firmly have they taken root in our language. In compliance with established custom, therefore, we have been obliged to apply the term of *Eastern Tartary* to the region of the Lyau and Mandshoors; and if we are guilty of applying the name Tartars as a general appellation to all the Asiatic hordes, their very neighbours the Chinese are equally guilty, as they class them all under the general name of *Ta-tse:* though the Turks, Mongols, and Mandshoors, are as radically different in their features and language as Hindoo, Chinese, and Arabs. Whether the Mandshoors are the aboriginal natives, or succeeded a previous race, we cannot determine, as they have no historical records; but they are called *Ny-uche*, by the Chinese, and are supposed to be the descendants of the *Kin*, who, in the 12th century, subdued Northern China, and were, in their turn, subdued by Jenghiz Khan, in the 13th century. We are told, that the Mandshoors are the same race who, at different periods of the Chinese monarchy, have been successively denominated *Sienpi, Geougen, Yew, Ookee, Sooshin, Moko*, and finally *Nyuching*, or *Kin;* and we know another tribe, called the *Syetan, Keetan*, or *Lyau*, which came from the same region as the Kin, and preceded them in the path of conquest. But whether these names really belonged to one and the same race,—or to different tribes of that race, who successively acquired domination over the other tribes,—or were appellations of different races, cannot now be determined; but it is probable they were all names of different tribes of the Mandshoorian race, and that these names are all Chinesian, not Mandshoorian, appellations.—The first tribe of whom mention is made in the Chinese annals, is the *Keetan*, who seem to have come from Mandshooria Proper, and to have fixed themselves in Lyautong, and founded there a monarchy, which lasted from 916 to 1117, or 200 years. They had two capitals in Lyautong,—Lyauyang, and Mookden or Shin-yang. This tribe gave more trouble to the Chinese than all the other Tartars. Though they made no fixed settlement in China, yet they so harassed the Chinese, that one of the emperors was glad to compound with them by an annual tribute of 200,000 taels of silver, and 300,000 pieces of silk. Unable to repel these Tartars from the frontiers, the Chinese emperor Whaytsong called the *Kin*, another tribe of Mandshoors, to his assistance, who, uniting their forces with the Chinese, defeated the Keetan in every battle, and reduced them to such extremities, that the remainder were compelled to abandon Lyautong and fly to the W., where they founded a new dynasty, called the *Western Lyau*, or *Kara Keetayans*, which comprehended all the tract between the Bogdo Alin and the Caspian sea, and of which Khashghar was the capital. This dynasty did not last a century till it, in its turn, was overthrown by the *Naimans* under Kushluck Khan, who, in

his turn, was defeated and slain by that mightiest of Asiatic conquerors, Jenghiz Khan. It is from the Keetan that the name of Keetay was applied to Northern China, and Kara-keeta to their Tartarian dominions, which extended from Korea to Kashgar. The name of *Kheeta* or *Kathai* is still applied by all the Mohammedan historians to the whole tract extending from China to Toorfan, and even W. to the Beloor. In the time of Jenghiz Khan, the Keetan rebelled against the Kin in Lyautong, headed by a prince of the old dynasty, called Lyewko, who raised 100,000 men to assist that conqueror; and, ascending the mountain Kin, to the N. of Mookden, sacrificed a white horse and a black ox, broke an arrow, and swore to be faithful to Jenghiz Khan. In 1215, he sent a list of the families which had submitted to him, namely, 600,000 which would give a population of 3,000,000 to Lyautong, all Keetans, independent of Kin families, so that Lyautong must then have been a very populous province. After the death of Lyewko, in 1225, his son Peetoo was raised to the throne of Lyautong as a dependent sovereign of the Mongol Khans. We hear no more after this of the Keetan princes of Lyautong. A Keetan prince, named Yeloo Chutsay, was prime minister to Jenghis Khan and his successors for more than 30 years, and proved himself an able and enlightened statesman for the age in which he lived.—The *Kin* dynasty, which ruined the Keetan in 1117, were another Mandshoorian tribe, who dwelt to the E. of the Keetan, to the N. of Korea, and alongst the Eastern sea. As Yeloo was the name of the imperial family of the Keetan, so was Wanyen that of the imperial family of the Kin, from Wanyen, the name of a principal tribe of the Nyuchi. This Mandshoor dynasty reigned 117 years over Northern China, Mandshooria, and Mongolia, as far as the 50th degree of N. lat. and 20 degrees W. of Pe-king. The princes of this dynasty were the *Altun Khans* of the Mohammedan writers, an appellation denoting the 'Golden Khans,' equivalent to *Kin* or 'Golden,' the name which Ogota, the first of the dynasty, gave to his new dominion. This dynasty was extinguished in 1234, under the reign, and by the power, of Oktay, son and successor of Jenghiz Khan. One of the Kin princes endeavoured to persuade Ningtsong, emperor of the Song dynasty, then reigning in Southern China, to make common cause with him against the Mongols, the enemies of both. But Ningtsong, instead of complying, refused, and exhorted all his subjects to assist the Mongols in driving the Kin out of China. When the Kin emperor was informed of the inflexibility of Ningtsong, he told him, by his ambassador—"To-day, Sir, the Western Tartars will destroy my empire; to-morrow they will conquer your's;" which prophetic declaration was exactly verified in 1279, when China was entirely conquered by Hoopitee, or Koobloy Khan.

It is believed that the present Mandshoorian family, who conquered China in 1644, are descended from the Kin imperial family: and the emperor Kaung-hu often affirmed it. But whether this really be the case or not, those of the Kin who escaped the sword of the Mongols, aided by the Keetans and Chinese, who all hated the Kin, fled into the N.W. parts of their ancient country, now inhabited by the Solon Tartars. Towards the commencement of the 17th century, the Nyuche began again to rear their heads, and become formidable to the Chinese, as the Kin of old had been in their day. This was accomplished by the union of seven chiefs, of so so many different tribes, into one government, under one prince, who, by this means, became the founder of the Mandshoor monarchy. This prince, Tyenming, reduced the khan of the Southern Mongols, now no longer for-

midable, and who was besides hated by his own vassals, to the state of a mere dependent of the Mandshoors; and Tyentsong, his son, deprived him of the title of khan, giving him only that of *wang* or duke. His grandson, Tsongte, became the founder of the reigning imperial dynasty, by his conquest of China in 1644, and extinction of the Ming dynasty.

The province of Shin-yang, or Mookden, has eleven fortresses of the first order, eleven of the second rank, and eight of the third. Some of these of the first rank are said to be as rich and populous as some of the provincial capitals of China; but, on the other hand, we are told that a great number of large and populous cities and towns it once contained are now in ruins, and that, instead of them, the Mandshoors have built a great number of military cities, and fortresses, and castles, to keep the inhabitants under, who are a stout and warlike people, very numerous, and very uneasy under the Tartar yoke The inhabitants of these fortresses, soldiers as well as others; are grown very rich and powerful, and drive a good commerce with the northern provinces of China; whilst the natives are, for the most part, kept in a state of slavery and subjection under them. If it be considered that the great mass of the Lyau-tongers are perhaps of Keetan descent; and that between them and the Kin, the ancestors of the present dynasty, a constant hatred always prevailed; that they bore a principal hand in the destruction of the Kin by the Mongols, in revenge for past injuries; and that they were well affected to the Ywen and Ming dynasties, as their surest protection against the descendants of these Kin or Nyuche,—it may help to explain the reason why the Lyautongers have been worse treated by the Mandshoor sovereigns of China than the rest of their Chinese vassals. The population of this country is very small, considering the extent, if we admit the statements of 1743 and 1761. By the former it is given at only 235,620, and by the latter at 668,852; and by the latest statement given by Mr Morrison, in the reign of Keea-king, it is made only 390,000; whilst in that given by the mandarins to Lord Macartney, Lyautong is made to have a population of 10,000,000. Nothing can be more stupid, discordant, and unsatisfactory, than such statements as the above. That it should have no more inhabitants, on the one hand, than one tenth or one fifth of that of Scotland, a country equal in dimensions, and lying between 40° and 43° N. lat., is so glaringly improbable as at the very first sight to render it utterly unworthy of all credit; and that, on the other, it should have a population five times that of Scotland, is equally inadmissible. That it should have had a population of 600,000 Keetan families in the commencement of the 13th century is at least possible, not to say probable; but, at the same time, is irreconcilable with a statement given by Fadlallah, which is only 700,000 inhabitants at the same period, unless it be supposed that the males only, fit for war, are intended, which is frequently the case in oriental statements, as is known to have been the custom of the Jews. It is a mortifying circumstance that something must be said on a subject on which nothing but what is discordant can be stated. Respecting the number of the present inhabitants of Mandshooria Proper, we are told that in the province of Tsitsicar, 740 miles long by 600 broad, according to the Jesuits' maps, and which occupies all the N.W. part, there were not above 10,000 families, as the governor told Gerbillon; and we are informed by the Dai-syn-i-toundshee, that the whole of Mandshooria contains only 47,124 tributary peasants, not including the aboriginal natives, and that it furnishes 10,000 Mandshoor soldiers. Nothing in this way can be imagined more unsatisfactory and meagre than this statement, but we have nothing better

to communicate; and it is really a problem worthy of solution, how a country ten times the area of Great Britain, and the major part of it in more southern latitudes, should be allowed to remain almost a tenantless waste, occupied by the beasts of the forest, in the very threshold of China, and how a few thousands of Mandshoor shepherds and hunters should still continue masters of 150 millions of industrious agricultural subjects.

The Mandshoors belong to the great race called *Tongooses* by the Russians and Tartars, and *Œvœn* in their own language. Their tribes are: 1st, The *Mandshoors* of Ningouta, the dominant tribe. 2d, The *Lyau* or *Keeans* of Lyautong, in subjection to the first tribe. 3d, The *Daoorians* or *Tagoorees*, under which are included the Solons near mount Siolki and the Humari on the Amoor, above its junction with the Soonggaree or Chuntungian of the Chinese. 4th, The *Diuchari*, as they are called by the Russians, above the Humari, removed into the interior by the Chinese government. They seem to be the same with the Han Hala Tatse of Gerbillon, and to have dwelt anciently to the N. of the Amoor, and to the E. of the Hinkan Alin, on the banks of the Han Hala, running E. to the Amoor. 5th, The Mandshoor fishers, called *Yupi Tatse* by the Chinese. This appellation comprehends the *Natki* or *Fiatta* on the Amoor, the *Ghilakee* or *Ketching Tatse* near its mouth, the *Orotchys* on the bay of Castries, the *Belchys* more to the S., and a tribe of Man lshoors settled in the north part of Saghalien island. There is a tribe who dwell near the Chikiri Oola on the N. of the Amoor, and W. of the Hinkan Alin, called *Orochon* by the Mandshoors, who may perhaps correspond to the *Orotchys* of Castries bay; but as it seems to be a hunting tribe, so denominated from the deer which draw their sledges, they must either have removed down the Amoor to the S. side near its mouth, or else that there are two tribes of the same name, the one hunters, the other fishers. The Natki employ dogs to draw their carts, and the Ghiliaks are said to use tamed bears for the same purpose. Whilst these tribes follow fishing and know nothing of agriculture, but are generally a good natured, simple, ignorant race, the *Deucharee* or *Han-Halas*, E. of Ningouta, are agriculturists, have both oxen and horses, and raise good crops of grain and pulse, though, like the Yupees, they are clothed in fish skins. The *Tagoorees*, who are a mixed race of Mongols and Mandshoors, submitted to the father of the emperor Kaunghee, whose protection they implored against the Russians: for these latter passing in armed barks out of the Amoor into the Soonggaree, secured all the rivers belonging to both, and became terrible to all the Mandshoors residing on their banks. The *Solons*, descended from the Kin who escaped the general destruction of their nation, are a stout, robust race, brave, and skilful hunters. Their women ride on horseback, draw the plough, hunt stags, and other game. A great number of Solons reside at Nierghi, a pretty large town, not far from Merghen and Tsitsicar.

Language.] The Toorkish, Mongolian, and Mandshoor languages, are radically distinct from one another. That of the last race is written in the character of the Mongols, who in their turn received it from the Oigoors, a Tibetian race, according to Mr Schmidt. It was not till the reign of Kaunghee that this character was adopted; as before that period they had attempted to express the sense and sounds of the Mandshoor language by Chinese characters, which was found impracticable. Kaunghee, therefore, in order to preserve the language of his nation, which was going rapidly into disuse, and in danger of being lost, ordered a special commission of

the best grammarians in Chinese and Mandshoorian at Peking, to compose a grammar and dictionary of the language expressed in the Mongolian alphabet, so as to make a complete repository of the whole language: which was done with great care and diligence, a reward being offered for every old word or phrase, which had become obsolete, that it might be inserted in this dictionary. This dictionary has been successively republished at Paris by De Langles and Klaproth, and the language has been pronounced by the former to be the most perfect of all the nomadic idioms of Asia, not excepting the Tibetian. The alphabet consists of 1,500 groups of syllables, which Langles has attempted to reduce to 29 letters, the majority of which have three forms, corresponding to the beginning, the middle, and the end of a word. The language is elegant, copious, abounds in words imitative of natural sounds, and is noted for its extreme softness of sound, as never admitting two consonants without a vowel between. It abounds in particles capable of modifying the meaning of words by being joined to them; and the verbs have a great number of inflexions like those of the Hebrew and Arabic. So copious is this language that it has not only names for every species of animals, but even words to express their several ages and qualities. The horse, as the most serviceable animal they possess, has twenty times more names than a dog, almost every motion of this animal giving occasion to a new name. How their language, a language of a semibarbarous people, became so copious in names and terms is a problem. It may be presumed that it was the language of their predecessors the Keetan and the Kin, who formerly reigned in Northern China, at which time these people, being very numerous as well as powerful, took care to cultivate and improve their language, the delicacy and copiousness of which the Mandshoors have endeavoured to preserve, by translating all the best Chinese works into their own language, and thereby improving both it and themselves. Yet it is said, that notwithstanding all the endeavours of the Mandshoor emperors to preserve and perpetuate their native language, it is on the decline: the conquerors gradually disusing it and using that of the conquered. It has one remarkable feature, that, though it belongs to the eastern extremity of Asia, it has many radical sounds closely resembling those of modern Europe, as may be seen by consulting the Mithridates of Adelung and Vater.

The Mandshoors are more robust in their make, but have less expressive countenances than the Chinese. Their women have not their feet cramped and distorted like those of China, and their head-dress consists of natural and artificial flowers. Their general dress is much the same with the Chinese.

CHAP. III.—CITIES AND TOWNS.

WHERE the population is scanty the cities must be few and small. Lyau-tong, being the most populous province, has the most cities, towns and villages. *Shen-yang* or *Mookden* is the capital, and was the residence of the Mandshoor *schwandecs* or princes immediately previous to the conquest of China. It contains several temples, and one in particular where the monarch prays alone on the first day of the year. It is composed of an inner and outer city: the wall inclosing the whole is 11 miles in circumference. There is nothing about this place that deserves particular description. It is the residence of a Mandshoor governor, and about 4000

troops are usually stationed here. It has four public tribunals, in which none but Mandshoors are employed, and their acts are all written in the Mandshoor tongue. The Chinese inhabit the outer and the Mandshoors the inner city. The former carry on almost all the commerce of this province.—*Inden*, rather a village than a town, contains nothing remarkable but the tomb of a Mandshoor monarch.—*Fong-whang-ching* is the best and most populous city of this province, and enjoys a very great commerce, being the key to the peninsula of Korea, which has drawn to it a very considerable number of Chinese, who dwell in the suburbs. Its chief manufacture is cotton paper, very strong and durable, but neither white nor transparent.—Lyau-yang is also a considerable city.—The chief places in Mandshooria Proper are *Kirin Oola Hotun* or *Ooanlin*, the largest town of the country; *Naun Kotun* on the Nonni; Ningoota, the capital of a military government; *Merghen*, and *Saghalien Oola-Hotun*, or 'city of the black river;' *Petune*, and *Pootay Oola Hotun.* These are all the places of note in this desolate and extensive region, and are mostly peopled with soldiers and exiles, the country seemingly being used for no other purpose but that of banishment. The principal Mandshoor families have all left the country, and followed the court to Peking, so that it has been materially injured by the conquest of China. The cities above mentioned are all very ill built, the houses and the walls surrounding the towns being constructed only of mud. The Jesuit fathers, who traversed this region to the S. of the Amoor, found numbers of ruined towns, and several antique remains, as several great stone stair-cases at Odoli Holun, a ruined city, with the vestiges of a royal palace, the like of which is no where else to be found here. These seem to have been the work of the Kin in the 12th century when their power was dominant in Central Asia. Above Saghalien Oola Hotun on the north side of the river are the ruins of *Aykom*, a Chinese fortress, built by the succesors of Hong-voo to repress the incursions of the Tartars. However, 20 years after the death of that vigorous emperor Yongloo, they re-crossed the Amoor and destroyed Aykom.

II. CENTRAL ASIA.

Boundaries and Extent.] Next to Siberia this is the most extensive region of the Asiatic continent. It is bounded in its whole extent by Siberia on the N.; on the E. by the region of the Mandshoors and Lyau-tong; on the S. by China, the Indo-Chinese States, Northern Hindoostaun, and Afghanistaun; and on the W. by Badakshaun, Great Bukharia, and Northern Toorkistaun. In its greatest length it extends from the 72d to the 125th degree of long. E. of Greenwich, or 2,625 British miles, and from the 27th to the 52d degree of N. lat., or 1,750 British miles in breadth, containing a surface of 3,266,500 British square miles. But the length and breadth are exceedingly various in various places, the much larger portion lying to the N. of the Mooz-Tagler and the wall of China, and comprehending a surface of 2,500,000 square miles. The tract to the S. of this vast range is chiefly comprehended in Western and Eastern Tibet, the Tartary of Kokonor, and the country of the Seefan or Toofan. This southern portion gradually diminishes in length till in the latitude of 28° N. it does not exceed 915 British miles. The whole of this immense region, excepting a small portion beyond the Siolki mountains on the confines of the Mandshoors, is an immense mass of elevated land rising like the boss of a shield from the centre of Asia, inclosed on all sides by lofty mountain-ranges, which serve as so many buttresses to this vast upland,

whilst its interior is traversed in every direction by wide plains and enormous ridges rivalling in altitude those which form its barrier. It is incontestably the highest region of the globe, as far surpassing the elevated uplands of the Andes, or the lofty table-land of Mexico, as these excel other tracts of a similar description whether in Europe or Africa, so far as the latter is yet known. The elevated platforms of South America are confined to the ridges of the Andes which are generally—the elevated upland of the lake of Titicaca excepted—from 2 to 3 degrees in breadth. These ridges skirt the eastern shore of the Pacific, and with the exception of the elevated platform mentioned above, and a few lateral ridges projecting westward from the main range, and of those which separate the numerous branches of the Oroonoko from those of the Maranon, and of that high belt which parts the waters of the latter from those of the Parana and Paraguay, all the rest of South America consists of immense plains, presenting nothing to the eye but a vast expanse of wood and water. With the exception of the Apalachian and Rocky mountains, and the table-land of Mexico, North America is almost one vast level, which, instead of being covered with immense forests traversed by ocean floods, is, for the most part, a treeless saline expanse, studded to the N. of 45° N. lat. with innumerable lakes. This singular configuration of the American continent sufficiently accounts for the immense magnitude and length of course of its rivers. The configuration of the Asiatic continent is widely different. Though large and extensive plains exist in different parts of its surface, as in the vicinity of the Persian gulf and Caspian sea, yet its aspect is exceedingly diversified, presenting multiplied and successive combinations of all that is beautiful, magnificent, and sublime in nature. Contrary to what takes place in America, the chief elevations of Asia are in the centre. From Central Asia, as from the very heart of the continent, all the grand rivers of Asia flow in every direction to the surrounding and subjacent regions, which circumstance of itself proves its vast elevation. As the bounding ranges of this vast convexity have been concisely described in our general view of the Asiatic continent, we shall proceed to the present political divisions of this region, which is sometimes divided into the two great general divisions of Northern and Southern Central Asia. The former of these contains Mongolia, Soongaria, and Eastern Toorkistaun,—and the latter, the upper basins of the Indus and Sutlej, commonly denominated Western Tibet, Tibet Proper, the Seefaun or Toofaun, and the Eluths of Kokonor. Having in the preceding chapters described the region of the Mandshoors, order requires that in the description of Central Asia we begin with Mongolia, the most eastern division.

I. MONGOLIA.

This extensive region has the Mandshoors and Lyautong on the E. and S.E.; the wall of China on the S.; Siberia on the N.; and Soongaria and the great desert of Cobi or Shamo, which separates it from the eastern extremity of what is absurdly denominated the Lesser Bukaria on the W. We must here, however, premise that for want of distinct and precise information, we are not able to determine the western boundary of Mongolia, especially on the S.W. angle.[5]

[5] It is admitted on all hands that on the side of Soongaria the boundary is the great range of the Bogdo, which is said to run from N. to S., and to join at its southern extremity the eastern termination of the Alak Oola or Alak Tagh. The misfortune in this case, however, is that we have not a single observation whether of longitude or

Physical Aspect.] This region is composed of mountains, hills, plains, and deserts; but the most striking feature is the great desert called Cobi by the natives, and Shamo by the Chinese. The precise extent of this desert is not known: we only know that it extends S. to Tibet, and W. to the lake of Lop, 25° W. of Peking. It extends thence N.E. to the Toola river, the eastern branch of the Selinga. Its longitudinal extent is at least 1,400 miles. Its breadth is various in various places, varying from 180 to 100 miles across. In some places it is quite bare, without wood, or water, or grass, except a few ponds or marshes formed by the rains, with here and there a well of water. It is larger and more frightful towards the west, of which quarter Marco Polo has given such fearful descriptions, as the habitation of spectres who wile travellers out of their way, so that they perish with famine, or are devoured by wild beasts. This part of the desert is called 'the Wilderness of Lop.' This commences at the city of Nijang, say the historians of the Tang dynasty, 250 ly or 70 British miles to the E. of Khotan. There in going east the traveller meets with 'the great running sands,' which are so named because these sands are moveable, and because pushed about by the winds they form waves and hillocks. What of this desert lies between Peking and Kiakhta must be crossed by all who take this route. The desert here commences about 12 days' journey to the S.E. of Kiakhta a little to the S. of the Toola, and is called 'the Hungry Desert,' as neither food nor water are to be got in it. Mr Bell, who went this route with the Russian ambassador, took 28 days to cross it, from the Toola to a place called Naring Karassu, and during all that space he saw neither tree, river, bush, mountain, nor house. This desert is much higher, he observes, than the level of China, the descent being much greater on the side of China than on that of the desert. But this must not be confounded with the Shamo itself which is a desert of moving sand, and in his route Mr Bell crossed a great sand bank 20 miles broad, and which was the eastern extremity of the Gobi or Shamo, which he was told was 30 leagues across in some places. The fact is that Mongolia is just a high, cold, and barren upland. It is divided politically into two regions, namely: 1st, Northern Mongolia, or the country of the Khalkhas, or Black Mongols; 2d, Southern Mongolia, or the region of the Yellow Mongols, including the Ortoo Mongols W. of the former.

CHAP. I.—NORTHERN MONGOLIA.

This region extends from mount Altay or Bogdo on the W., to the province of Solon on the E., an extent of 22 degrees of longitude, and from

latitude to enable us to say at what point of either or both the junction of the two ranges take place, and we know not the precise line of direction of the great Bogdo, none of the Jesuits who composed the great maps of China and Chinesian Tartary having travelled in this direction. The great Bogdo seems also to be connected with the Kuenlung, the northern frontier of Tibet, and with the mountains of Shensee, by lateral ranges running across the Cobi from N.W. to S.E. in various places. It is said that in going from Khya-yuquan N.W. to Hami (the former is the N.W. termination of the great wall in 39° 48′ N. and 17° 21′ 30″ W. of Peking) the ground rises till we arrive at Hami (42° 53′ 20″ N. lat., and 22° 23′ 20″ W. of Peking) at the foot of the mountains, where the road divides, the one to the north of the Alak mountains into Soongaria, and the other to the S. to the Mohammedan cities of Little Bukaria. The S.W. must be intended, as another road leads S.S.E. from Hami to Sha-chew, and from thence direct E. to Khya-yuquan above mentioned. The matter being thus uncertain, we can only say, in general terms, that the Shamo or Great Desert is in this quarter the S.W. boundary of Mongolia, and separates it from the oasis of Hami.

the 51st degree of N. lat. to the southern extremity of the Kobi or desert, which is reckoned to belong to them; but in Du Halde's account, the breadth is but 5½ degrees, or from the 45th to the 51st degree.

Boundaries.] This region has Soongaria on the W.; the Mandshoors on the E.; the Sharra Mongols on the S. and S.E.; and Siberia on the N.

Mountains.] The country is traversed by several ranges of great elevation, as the range of *Sochonda*, in which are the sources of the Ingoda, a tributary of the Onon, the *Kentey han Alin*, in which are those of the Onon, the Toola and the Kerlon,—and the *Hangay Alin* which runs S.E. from the most eastern windings of the great Bogdo through Mongolia, and is called *Changai Alin* by Pallas,—and finally the great Bogdo itself, supposed by the natives to be the highest range of central Asia, and which rears its rugged sides and snowy summits with striking sublimity, between the Mongolian and Soongarian deserts. This chain is of great breadth and length as well as elevation, and consists of a number of parallel ranges under different appellations, running from S.E. to the N.W. and from S.W. to N.E. On the Russian frontier, is the chain of *Egoodin Chau Alin*, which commences 157 versts W. of Kiakhta at the source of the Katsooratai, which falls into the Dzeltouri 56 versts from its entrance into the Dzida. This chain, also called *Uhdensong*, runs 200 versts N.W. separating the sources of the Ekhe, the Dzida, and the Oukee from each other. The road from Kiakhta S. to the Mongolian upland, is a continued ascent of several days' journey. Now as Kiakhta is itself 2560 feet above the sea, the height of this plateau must be very great, and the cold increases gradually till it becomes intense. On the road to the Oorga or court of the khan of the Khalkhas, from Kiakhta—from which it is 220 miles distant—several extensive mountain ranges must be crossed, as the Blue mountains, the White mountains, with long and narrow defiles, and the Mangatai mountains to the S.E. steep and frequented by wild goats, deer, foxes, steppe-cats, and bears. On the left of the road is an insulated volcano, called *Bangee*, and the Tumecky mountains. From a high eminence in this last range, is an extensive view of naked hills, whose sharp summits seem like a succession of blue waves. To the E. of the Mangatai or steep mountains, rises at a great distance *Mount Duloshee*, insulated like Mount Blanc, and presenting the appearance of an immense cone, and still farther east *Mount Mañdal*, a still loftier summit. These two lofty summits undoubtedly belong to the range of Mount Kentey. As we approach Oorga, the mountains increase in number, but are covered with forests large and extensive, used as hunting grounds for the grandees of the khan. Twenty versts N. of Oorga is the range of Guntoo, the highest Timkowski and his suit had yet crossed, and which was covered with snow several vershoks deep."

[6] All the mountains on the road had *obos* or cairns of stones on their summits, and on the highest summit of the Guntoo, is a very large obo surrounded with wooden pillars, bearing inscriptions in the Tibetian language. Every high mountain, shady tree, or large river, is considered by the Mongols as the abode of some good spirit, in whose honour these obos or heaps of stones are erected. Every traveller passing by any of them, feels himself bound to alight, and standing towards the south side of the obo, with his face turned to the N. bow to it and mutter his prayer of *Om-ma-nee-pai-mee-om*, at the same time throwing down some of his property before it. Frequently pieces of linen rags are fluttering upon a pole, appended to these obos, and still oftener bunches of horse hair. Amongst these mountains is one called *Khan Ola* or the Royal Mountain on which are several temples and sepulchres. As this region is but comparatively little known, we cannot pretend to describe the other ranges; their names as they occur in Du Halde and D'Anville's maps are all that we know about them, and to these we refer such readers, who wish for more information, as these will communicate more to the mind by the eye than any verbal description.

Rivers.] This part of Mongolia is pretty well watered, especially to the N.W. and E. The chief rivers are the *Selingha*, *Orkhon Toola*, *Kerlon Argoon*, *Onon*, *Khalkha Pira*, *Altay* or *Siba*, *Hara*, *Eeroo*, *Iben Pira*, *Patarik Pira*, *Tegurik Pira*, and others, all famous in Mongolian story.—The *Selingha* is composed of a multitude of minor streams, all originating at the base of the mountains of Bogdo. But its chief source seems to be in the lake called Husukul or Kosogol in 52 N. lat. and 16° 27′ W. of Peking, where it passes out under the name of the *Ekhe* according to the Russian maps. The other chief branches are the *Horatol* from the W. and the Haswee from the S.W.—The *Orkhon* is the great southern branch of the Selingha, and rises in the same vast range of mountains in 46° 40′ N. and 14° 40′ W. of Peking, and running in a N.N.E. direction, joins the Toola in 49° N. and 11° 25′ W. of Peking, after a course of 300 B. miles exclusive of sinuosities which are very great. The *Toola* is the third large stream which forms the great volume of the Selingha. It rises in 48° 10′ N. and 8° 30′ W. of Peking, in the very centre of the Kintey or Kinhan range, being divided from the source of the Wanan by an intervening ridge; from that of the Kirlon by another; by another from the sources of the Khara and Eeroo; whilst on the N. it is finally separated by a ridge from the source of the *Podemnaja*, which enters the Selingha at Selinginsky. This must therefore be a very elevated spot. as it divides the waters which flow N. to the Arctic sea from those which descend eastward to the sea of Amoor. The Toola runs first a S.W. and then a N.W. course to the Orkhon, of about 300 miles, and a breadth of 300 yards nigh the confluence, flowing gently over a pavement of rocks. The combined stream, after a N.E. course of more than 100 miles, joins the Selingha about 20 miles to the S. of Kiakhta, when it enters eastern Siberia, and passes the town of Selinginsky 91 versts N. of Kiakhta, with a stream double the breadth of the Thames at London bridge, and finally enters the sea of Baikal in 52° 23′ N. and 107° 30′ E. long. with a stream a mile in breadth. Issuing thence under the new name of the *Angara* in 52° N. and 105° E. long. with a channel of a mile broad and 12 feet deep, and so clear that the pebbly bed is distinctly seen, it runs N. and N.W. till it joins or rather receives the Jenisea, after a comparative course of 1440 B. miles from the mountains of Bogdo, and 780 from the Baikal More, and 660 under the name of the Selingha. The upper basin of this noble river, comprehending the three minor basins of the Selingha, the Orkhon, and the Toola, embraces the N.W. angle of northern Mongolia. This large stream is in fact, though not in opinion, the main branch and parent stream of the Jenisea, and should in all justice be so denominated by modern geographers.—The *Kerlon* has been already described in our account of the Mandshoors, as the twin stream of the Amoor. It is under the name of the *Kerlon* only that it can be called a Mongolian river, as beyond the Koolon Noor it is partly a Russian river. It is but a small shallow stream not above 60 feet broad, and runs a long winding course of 600 miles, almost due E. to the Koolon lake which it enters in 48° 50′ 24″ N. and 0° 45′ E. of Peking, and issues out under the name of the Argoon.—The *Onon* has been already described.—The *Khalkha* rises in the Siolki range, on the confines of the Mandshoors, in the lake of Kalhee, at the base of the Mukhtur Alin in 48° N. and 4° 30′ E. of Peking, and runs a winding but generally western course of 1600 miles to the Puyur lake. Emerging thence under the name of the *Urson*, it runs N. to the Koolon Noor, which it enters on the eastern side, in 49° N. and 1° 30′ E. of Peking, after a course of 70 miles under

the name of Urson, as above said. This river is considered to give name to the Khalkhas, although they do not frequent it much.—The *Altay* or *Siba* is merely noticed as the place of encampment of a petty Mongol khan. The *Hara*, *Ecroo*, and *Iben Pira* are all streams that fall into the Orkhon, the two former from the S.E., and the latter from the W. In 1726 the abode of the Khutuktu-lama and the khan of the Khalkhas was in 49° 26′ 47″ and 10° 59′ W. of Peking, though now it is placed farther S. on the Toola.—The *Patarik Pira* is parted from the source of the Haswee by a ridge of the Changai, and runs 2 degrees S. to the Chahan Omo, or 'white lake.'

Lakes.] This region has several large, and a considerable number of small lakes, or rather meers or ponds. The most northern is the *Husukul* or *Kosogol* in the N.W. point, where the Chinese and Russian frontiers meet, but it is wholly within the Mongolian frontier, in N. lat. 52°. It is completely surrounded with mountains, called in the map the Whaypoldok Alin, except to the S.E. where flows out the Ekhe the N.W. branch of the Selingha. It is said to be 70 miles from S. to N. and 20 from W. to E.; but it does not seem to be half that size in the Russian maps. The largest lake seems to be the *Koolon Noor*, into which the Kerlon and Khalka rivers run, and out of which issues the Argoon. It extends from 48° 45′ 50. N. to 49° 26′ N.; and is about 46 B. miles long from S.W. to N.E. by one-half in breadth. Whether it is fresh, or brackish, or salt the Jesuit fathers have not told us, as they do not seem to have tasted it. It is probably fresh. Towards the N.E. it is hidden for much the greater part by mountains, so that Gerbillon only saw its S.W. extremity, where it was so shallow that one might wade 4 Chinese furlongs and not find above three feet water. The shores of the lake at the S.W. end are barren and sandy, without herbage, except a species of tufty herb, of which the camels are very fond.—Next in importance is the lake of *Puyur*, *Puir*, or *Piur*, about 70 miles in compass, extending from S.S.W. to N.N.E. and abounding in fish. On account of its great extent, the *Koolon Noor* is called by the Tartars *Argoon Dalay* or 'the sea of the Argoon.' The names of these two lakes have been strangely corrupted by all the Western or Mohammedan historians from ignorance of the Mongolian language, in which the term *noor* always signifies a lake, as Balkhash Noor, Suissan Noor, Altin Noor, and others. These historians, as Abulghazi, and those whom La Croix followed in his life of Jenghiz Khan, identifying this word with the term *Nauir* or *Nahar*, 'a river,' in the Hebrew, Arabic, and other kindred languages, have converted the Koolon Noor or Nurr into Collanawer, and the Piur Noor into Biurnawer, thus making them both rivers instead of lakes, and in this way the lake of Koolon has been confounded with the Toola by the authors of the Modern Universal History. The nomadic hordes, who encamped on the borders of these two lakes and the streams nigh or connected with them, were denominated the Su Mongols and Water Tartars, by the Western historians, in opposition to those who wandered in the dry and thirsty plains of the Shamo.

Climate, Soil, and Produce.] From its high elevation, this region is very cold, especially in winter, but the two latter form a meagre subject, of which but little can be said. The mountains of Kinhan or Kenty seem to be well wooded on their slopes, indicating a much lower elevation than those of the Mooz Tagler, and the Himallah, which are totally destitute of that necessary article. Gerbillon, who travelled alongst the Kerlon and Toola, gives us a very favourable picture of the mountains near their

sources, especially those near that of the latter. He describes them as covered with beautiful woods of pines and firs, and as abounding in wild strawberries, in shape, size, colour, and taste, exactly resembling those of France, and mentions a mountain covered with woods full of them. The same circumstance was noticed by Moorcroft in the vicinity of the Nitee pass, where the mountains were covered with strawberry plants, with yellow, red, and white flowers, and having a cone of seed without any pulp. On the banks of the Upper Toola, among the mountains, is the Han Alin, a high range quite covered with pines and firs. Moorcroft travelled 30 lys alongst the side of this forest, the resort of bears, stags, and wild boars. The Toola, in this part of its course, forms several small isles, full of most delightful groves, and both its banks are lined with bushy and beautiful trees, and beyond these are meadows of the finest and richest grass. The stream is exceedingly transparent, and the water excellent, running over a bed of flints and pebbles. In fine, Gerbillon describes this place as the most charming he had seen in all Mongolia. The Khalkhas, in fact, possess by far the best part of Mongolia, for this plain reason, that it is best watered, and the pastures and meadows on the banks of the Selingha, Orkhon, Toola, and Kerlon, have none equal to them in Tartary, and are of more account with the Mongols on this account than any other streams that are found in this region. These meadows and plains afford pasture for innumerable flocks of horses, camels, sheep, goats, cows, and oxen, which constitute the sole wealth of the Mongols. Though the great elevation of the country be the reason why so much desert exists in Tartary, yet these deserts are not altogether so frightful and barren as they have been represented by some travellers. Setting aside the Gobi or Shamo and a few other small sandy tracts, all the rest afford good pasture and abundance of grass, as high as a man's waist, which would grow still higher but for the scarcity of water. From this defect most of it decays presently at the root; and as withered grass quite chokes up the young, the Mongols in spring, like the Indians of North America, set fire to the old herbage, which sometimes spreads round to a circle of 100 leagues. In a fortnight after, the new grass shoots up every where to the height of a span, which shows the great fertility of the soil, and so much of this vast region, as is supplied with water, could support quadruple the number of the present natives were it cultivated, but nomadic tribes never think of agriculture, as it is quite inconsistent with their wandering habits. The Jesuit missionaries, however, say that all the region westwards, from the Mandshoors to the Caspian sea, is generally unfit for tillage, and that that pastured by the Naymans, and those of Korchin and Oban, in S.E. Mongolia, are worst of all.

Mineralogy and Zoology.] Of the former we may be said to be quite ignorant, and of the latter our knowledge is very limited. It may be presumed, from the mountainous nature of the country, that it should abound in metals and minerals, especially as Russian Daouria, a province very similar in aspect, is noted for its minerals. It abounds, however, with all sorts of game, even of those known in Europe, as wild boars, hares, deer, squirrels, foxes, and an animal called *tael-pe*, the skins of which are made into mantles at Peking to keep out the cold. Yellow goats, so common in Southern Mongolia, are not so here. Tigers and leopards are numerous. Of the former there are two kinds, the red and the white, but both striped, the one with black lists, and the latter with black and gray. They are very large and nimble. The other animals which

roam in Mongolia and Soongaria only become known by their occasional visits to Siberia and China. All the animals useful to man are here found in a state of nature, as the wild horse, called *takea* by the Eluths, and *taki* by the Mandchoos. The *koolan* or wild ass inhabits the steppes and open plains, and does not appear beyond 48° N. lat. His flesh is used as food. The *shiggetai* or *equus hemionus*, an intermediate link between the horse and the ass, is found in droves on the banks of the Onon, the Argoon, and the Amoor, in the Shamo, in the vicinity of Hami and Shachew, and through the whole of Tibet. He shows more intelligence than the common ass, and has been tamed, but does not entirely lose the wildness of his character. He is extremely fleet, so that no horse can outrun him. The double-humped or Bactrian camel wanders independent in the Mongolian wilds. The mountains near the source of the Amoor mark the limits of the rein-deer to the S.; but the elk is found as low as 45° N. lat. It is called *hautchan* by the natives. The missionaries saw some which when killed were larger than the biggest ox. They frequent the boggy grounds near the Siolki mountains, where they delight to resort, and are very easily killed, their great weight impeding their flight. The argali or wild sheep, the goat, the chamois, the wild goat of Caucasus, the *antelope gutturosa*, and the *saiga*, the yellow goat of Du Halde, wander in flocks on the steepest mountains. The musk-deer, which delights in cold and boundless solitudes, inhabits Mongolia, Daouria, the mountains near the source of the Onon; and on the S. is found in Tibet, in the mountains of Shansee, in those of Quangsee and Tongking, and on the W. is found, in the valleys of the Upper Indus and Satlej, in the mountains of Cashmere, and in the subalpine region which flanks the Great Himalaya on the S. Towards the N. it has been found on the banks of the Yenisea, near Krasnoyarsk. Among the ferocious animals are brown and black bears, the *korsak*, the *karagan*, and the white lynx called *irgis* by the Kalmuks. Regis mentions a feline animal called the *chulon* and *chilison*, which he calls a species of lynx. It has long soft thick hair of a grayish colour, and its fur is valued at the courts of Russia and China. Other feline animals are the *karakal* or *karakulak*, (black ear), the *manul*, and the *julbar* or ounce. All the fur-animals of Siberia are found in Central Asia. One would imagine that in this elevated and extensive region Nature had assembled into one corner of the world various races of animals which exist in regions far removed from each other, and from this lofty platform it may also be very probably supposed that several races have descended into the surrounding countries.

Inhabitants.] The present inhabitants, or more properly nomades, are *Khalkhas* or Black Mongols,—a branch of the great Mongolian family, who have inhabited the Northern part of Central Asia from a period long antecedent to the dawn of history. Their historical epoch is of very modern date, commencing with the rise and reign of Temujin, afterwards called Jenghis Khan. Under his reign they rose first to notice as the most warlike and destructive of all the nomadic tribes which had from immemorial time wandered in the steppes of Central Asia. Before that epoch their name was not so much as known, except to their kindred tribes. But subsequent to the reign and conquests of that sanguinary hero, their name swallowed up those of all the other tribes who wandered with their flocks in this region, which has ever since borne the denomination of Mogulistan or Mongolia. That the names *Mongol* and *Tartar* are entirely modern, all allow; but how these appellations came to be given to the no-

madic tribes of Central Asia none can divine. There is no appearance that the nomadic tribes of Mongolia called themselves by these names, or that their neighbours denominated them so, or that they were known to them by these names before Jenghis Khan. These names cannot have come to us from the Chinese, for we had them before we had any knowledge of or connection with China; and the name *Tata* or *Tatse*, so often met with in the Chinese annals, was indiscriminately bestowed by the Chinese writers on all the nomadic tribes of Central Asia, and what was common to all could be peculiar to none. It equally belonged to the Turkish tribes as well as to the Mongolian. According to a Mongolian work, entitled *Norbou-prengba*, the Mongolians were called *Bidæ*; and by Ma-touanlin, a respectable Chinese author, they are called *Pe-ti*, or the Northern Ti. The name of Mongol could not come from the Hindoos, as they had no direct communication with them, nor are they mentioned in any of their mythological accounts. But the relations of the Mongols with the Tibetians were very close and intimate, and up to the time of Jenghis Khan, the former were called *Pidæ* or *Pedæ* by the latter. There is no reason why we should not believe that the Mongols called themselves also by the same name at that time, and that consequently Pe-ti was the name by which they were known also to the Chinese, because it is well known that Mongol is a recent denomination. It is certain that the name Mongol is not found in all the ancient writings of the Chinese historians. At the time of Pakba Lama, in the reign of Kooblay Khan, near the end of the 13th century, the Tibetians no longer designated the Mongols by the name of *Pidæ*, but by that of *Hor*. The square character which Pakba composed for the Mongols by order of the emperor Khou-vilai (Kooblay Khan) was then called *Hor-yig*, a term signifying the New alphabet. Many chapters of the Norbou-prengba, and amongst others those which make mention of the nation of the *Bidæ*, comprehend the narratives, the histories, and the prophecies of Lamadchou-adichah, a personage very celebrated in Tibet, and who lived at an epoch far anterior to Jenghis Khagan. At this very day the Mongolian tribes who dwell to the N. of the upper course of the Kinsha Keaung, in Northern Tibet, are called in Tibetian *Hor* and *Ghia-Hor*, or 'the Black Hor.' The above remarks are taken from Schmidt's letter to M. Remusat, professor of Chinese at Paris.[7] The Khalkhas, according to Schmidt, are the descendants of those Mongols who were driven out of China by the cele-

[7] Mr Schmidt is a very learned protestant missionary, now or very lately engaged in translating the New Testament into the language of the Mongols and Khalkhas who inhabit alongst the Russian frontier to the S. of Selinginsky and Kiakhta, and also in compiling a Tibeto-Mongolian dictionary. His acquired knowledge of the Mongolian language has enabled him to throw a new light on the languages and tribes of Central Asia. He has declared the works of Abulghazi and Arabshah, on the origin of the nomadic tribes of Asia, totally unworthy of credit, and that the Mussulmaun writers were completely ignorant of the history of Central Asia. We can refer such readers as are curious on this subject to Georgi's account of the Kalmucks and Pallas' travels alongst the Mongolian frontier, where he will find the traditionary accounts of the Kalmucks quite at variance with the ridiculous fables of Abulghazi, Arabshah, and other Mussulmaun writers, who have hitherto been implicitly followed by La Croix, Strahlenberg, Des Guignes, and even by Remusat and Klaproth. This letter of Schmidt, published in the first volume of the Journal Asiatique, (see p. 324, 327, 330, of that work,) gave great offence to Joles Von Klaproth, who replied to Schmidt. This has been followed by a counter-reply from Schmidt, published in 1827, in German, 8vo. and entitled 'Researches into the History of the People of Central Asia.' The same learned gentleman has been enabled to publish, by the patronage of the emperor, the translation of the Mongolian history, composed by Setsen Sanan Keonug Taidshi, a learned Mongolian chief. Mr Schmidt has also published a comparison of the doctrines of the Buddhists with the opinion of the Gnostics, 8vo. 1828.

brated Hongvoo, the deliverer of his country and founder of the Ming dynasty, in 1368. They are distinguished from the Sharra or Southern Mongols in this, that the latter always remained in their present settlements, whilst the former, driven out of China, retired to the N. of the Shamo, and lived under their own khans, who were nominally subject to the khan of the Sharra Mongols. Upon the expulsion of the Mongols from China, the princes of the race of Jenghis Khan seized each a territory for himself, forming different hordes and petty sovereignties. The chief of these princes was called the Chahar Khan, who was descended from the elder branch of the family of Kooblay Khan. To this chief all the other Mongol hordes were nominally tributary, including the Khalkhas and Eluths. But in process of time the two latter grew too powerful even to acknowledge this supremacy of the elder branch, and became totally independent of the khan of the Sharra Mongols, who was himself compelled, in 1630, to own the supremacy of the Mandshoor princes. The Khalkhas, who enjoyed by far the best portion of Mongolia, increased very rapidly, and quickly became powerful, rich, and independent of the authority of the Chahar Khan. Their *taykis* or heads of tribes, who were all of the family of Kooblay Khan, growing numerous, became gradually independent of each other; and before the war with their neighbours the Eluths, then also independent of the Sharra Mongols, they were ranged under seven standards, or chiefs, three of whom received, as the most powerful, the title of khan, from the Great lama of Tibet, the supreme pontiff of the Mongolian faith. The first of these khans, called the *Shassaktoo*, to distinguish him from the other two, possessed the country immediately to the E. of Soongaria, extending from the most western range of the great Bogdo eastward to the Selingha, Orkhon, and Toola rivers. The *Tooshidtoo* khan, the most potent of the three, possessed all the tract eastward from these rivers to mount Kentey or Kinhan Alin, whence the Kerlon and Toola derive their sources. The *Cheching* khan resided towards the source of the Kerlon and alongst that river as far E. as the Argoon and Puyur lakes. It must be observed, however, that most of the taykis who were under these khans acted as sovereigns in their own territories, and paid these khans no further deference than that of allowing them the precedence in their *kourouttae* or diets, held for the conducting of all public business. The number of the Khalkhas in 1688 amounted to 600,000 families, or 3,000,000 persons, and they were very rich in flocks and horses, while all the tribute they then paid to the Celestial court was only a dromedary and nine white horses, for which they enjoyed a free trade with China. But an unfortunate rupture with the Eluths, which was caused by the nefarious conduct of Tooshidtoo Khan and his brother the Khootookhtoo lama, proved the ruin of their prosperity, and compelled them, to avoid utter destruction, to implore the protection of the emperor Kang-hee and become his vassals. Their petition was granted and the offer accepted, and after several engagements, the Eluths were finally defeated in 1696, and the Khalkhas restored to their wonted territories. By the successful termination of this contest the sovereignty of China was extended W. and N.W. to Soongaria and the Russian frontier to the S. of the Baikal More, and the Khalkhas have ever since been the voluntary vassals of the court of Peking. They were divided into three standards by the Chinese, but the chief khan seems to be the Tooshidtoo, whose camp or Oorga was placed on the Iben Pira in 1726, a small stream which falls into the Orkhon on the left bank, 49° 26′ 17″ N. lat. and 10° 59′ W. long. of Peking. It seems at present to be on the Toola river 220

miles S.E. of Kiakhta, and has been converted into a sort of town called Kyræ. The temples, the palaces of the khan and the Khootookhtoo lama, the houses of the lamas, and the palace of the Chinese viceroy and that of the Russian mission, are wooden buildings, the rest are felt huts. It may be observed that none of the Mongol princes or chiefs of the nomadic tribes are now allowed to take the title of khan as heretofore. The prince of the Khalkhas does not, it would seem, pay any tribute to the court of Peking, but on the contrary receives magnificent presents, as an acknowledgment for his tribe serving as a sort of garrison on the Russian frontier.

Religion.] What was the religion of the Mongols before the accession of Jenghis Khan, is difficult to determine, as we have no accounts of them prior to that period ; but it seems to have been a species of Shamanism. They received, however, in the reign of Kooblay Khan, the system of Boodha, and the use of alphabetical characters through the medium of Pakba lama, a learned Tibetian. This eminent personage was honoured by Kablay with the title of '*the pre-eminent lama*,'—a title which appears, in the Mongolian history of Setsen Sanan Keoung Taidshi, to be expressed in the three languages of Tibet, China, and Mongolia. He was also denominated in these languages, 'king of the doctrine and of the three kingdoms.' By his influence, and that of the Tibetian priesthood, the Mongols became complete Boodhists ; but after their expulsion from China in 1368, the Mongols relapsed into Shamanism, a fact which Schmidt has proved from the Mongolian history above mentioned. There we are told, that Altan Khagan, of the tribe of the twelve Tummeds, in conjunction with his brother, Gun-bilik-merg-hin-djinong, of the Ortoos tribe, governed a great part of the Mongol nation. This personage, at the age of 67, marched against Kharra-toebit (Black Tibet), and subdued the two divisions of the Upper and the Lower Ouigoors, in 1573. He made prisoners three chiefs of the Lower Ouigoors, with a great number of their subjects, and carried away, to his own country, Arik-lama and Goumy-choga-bakchi, with a great number of Tibetians. It was there that Arik-lama, having rehearsed to the Khagan, with very great detail, the dogmas of the succession of births, according to the three unlucky degrees of nativity, and their evils, and the way of arriving at the kingdom of the Aganista (this is a species of the Tœngri or divinity, in the mythology of the Boodhists), the science of the glorious advantage from the deliverance which one can obtain or lose by his virtues or his vices, the soul of the Khagan felt a commencement of the faith, and he set himself to recite the grand formula of the six syllables, "*om ma ni pad mi khom.*" It is clear from this, that after the Mongols were expelled from China, Boodhism terminated amongst them, and made way for the old worship of the Tœngri, or spirits; and more than 200 years elapsed before that Boodhism was introduced anew amongst them, on which the Mongolian history has furnished the most exact dates. The Boodhism of the Mongols is exactly the same with Lamaism, the system practised in Tibet. It differs from Shamanism in this, that while the latter allows no succession to the numberless Tœngri or gods, whether in time or place, the former teaches, that by a mysterious operation performed in the person of the Grand lama, the same divinity subsists eternally in this supreme pontiff under different human forms which he deigns successively to assume. In their language Boodha is called Chiggimoonee, and, amongst the Kalmucks, Chakamoonee or Sacyomoonee. Moonie signifies a saint. In the same language, Tagounzilan-irakhsan, or the Comer, is one of the names of Boodha, intimating that he comes not into the world

by birth like human beings. Another Mongolian name is Chakea Singha, the Lion Chakia; and Chakia üin Arslan, Lion of the family of Chakia. This system teaches the transmigration of souls. Whilst the Russian embassy, in 1820, was on the road to Oorga, the Russians were requested not to fish, as the souls of their ancestors might have passed into fish. Besides this common doctrine, they believe in a future state, purgatory, the invocation of saints, image-worship, confession, absolution, pardons, and other doctrines so very conformable to the Romish system, as celibacy in both sexes, monasteries, nunneries, crossings, holy water, beads, &c. that it seems a perfect counterpart of it. They believe in the incarnated Boodha or Fo, but they also believe that he communicates his divinity to his chosen servants, who officiate as his vicars in various parts of his spiritual dominions. These vicars are, in the Mongolian language, denominated *khootookhtoos*. This is a very convenient piece of ecclesiastical policy; for, considering the immense extent of his spiritual empire, it is impossible for by far the greater number of his spiritual subjects to come all the way to Lassa, and worship his incarnate person. To save them the toil and trouble of so distant a pilgrimage, the Grand lama has appointed chosen lamas, to whom a portion of his divinity is communicated, to act in his name and authority, and to confer the same blessings, and receive the same homage, as he himself. There are reckoned not less than 10 khootookhtoos in his wide spread empire; and the lama khootookhtoo of the Khalkhas resides at Oorga, where he ha a grand temple, and there receives the worship of his Mongolian votaries. Though the khootookhtoos, like their master, the Dalai lama of Lassa, never die, yet they have not like him the power of choosing the body in which they are to re-appear. The choice generally falls on some child of some great family, who is, in consequence, regularly trained for the office. This khootookhtooship was founded among the Khalkhas in 1680, by a brother of Tooshidtoo-khan, who had himself been bred a lama, and served his noviciate at Lassa during 8 years. There he had acquired so great a reputation among his fellow lamas that he determined to set up for himself, pretending to be a living Fo as well as his master. The scheme succeeded so well that the Khalkhas readily believed his pretentions, and adored him as an incarnated lama, and his brother went regularly on set days to worship him, gave him on all occasions the upper hand, and was entirely managed by him. Ever since, the apotheosis has been regularly renewed, and the Khalkhas believe their khootookhtoo to be as divine and immortal as the Dalai lama himself. The last incarnation of this person was in 1820, when a new khootookhtoo was brought all the way from Tibet by a caravan of 1,000 camels. He was then a child of seven years old. The Oorga being the residence both of the political and spiritual heads of the Khalkha community, is resorted to from all parts of Northern Mongolia, and by lamas from Tibet, China, and other parts of Central Asia, and by traders from the surrounding tribes. The lamas are held in great veneration by their ignorant votaries, who receive absolution from them on their bare knees and bare-headed, and believe that they possess supernatural powers, and that they can bring down hail and rain from heaven. The lamas go with their heads and beards shaved, and wear mitres and caps like bishops. The Khalkha lamas have many stone temples and monasteries. In these they meet for religious service, and sing alternately and in chorus, accompanied by the sound of noisy instruments. Indeed, their whole manner of worship bears so strong a resemblance to that of the Roman Catholics, that all travellers who have

witnessed it have been struck with it. The dress of the *ghyllongs* or monks bears a great resemblance to that of the Catholic priesthood. Their idols or images of Boodha are brought generally from Tibet, and are represented in a sitting posture, with tapers burning before them in the dark recesses of their temples. These tapers are generally perfumed with musk. The lamas are very numerous, as every Mongol family of any distinction considers it their duty to train up one of the family for the holy office. Their sheep-skin caps are all dyed yellow, but that of the khootooktoo is of yellow satin, with the four corners turned up and faced with extremely fine black sable. He also wears a long gown of yellow satin, the colour worn by the emperor of China. Sometimes the cloak is red instead of yellow. In several places are whole communities of lamas, living together in the vicinity of some stone or wooden temple, one of which, near the mountain Minga Dara, is inhabited by 1,000 of this class. They affect an appearance of great devotion and abstraction, and seem always so engaged in reading their sacred books, as to pay not the smallest attention to external objects. They always seem praying or reading, continually repeating, if not reading, the well-known Boodhist prayer of "Om ma ni pad mi khom," in a sort of harmonious low tone like the humming of a bee, a prayer which no one has yet been able to understand or explain. Their votaries leave all their spiritual concerns in their hands, and the duty of prayer is performed wholly by proxy, being either performed by the lamas, as there are no congregational meetings of the laity for religious worship, or by prayer mills, which are set in motion by wind or water, which the lamas find much more expeditious and easy than the usual mode of oral petitions. As the whole burden of prayer is devolved by the people on the lamas, this ingenious mode of performing it by machinery was resorted to to save the continual toil of oral repetition; and it even saves the people the trouble of resorting to or sending for a lama; for, by dint of this expedient a Tartar can pray as long and as often as he pleases, and it is a much cheaper mode of performing the duty than the candle-worship of his Russian neighbours, and less troublesome than counting beads like some of the Greek clergy when engaged in company. This method is performed in the following way: A Mongol procures a number of prayers from a lama, written on a long slip of paper, and this he hangs where it will be moved by the wind, passengers, or any thing whatever that comes in contact with it, or it is rolled round a barrel or cylinder of a small windmill. One stage contains 100 of these praying-mills, and the roof of a lama chapel has so many hanging prayers, that not one can move a step without also moving petitions. Near the door of the chapel is a case containing the books of their law, secured from intrusion by iron bands. This case turns round on its axis vertically, and is easily put in motion together with a number of bells and pendants. The motion of these whirligigs—which are sometimes erected near falls of water in order to produce it—saves the trouble of repeating them; for, supposing 100 prayers pasted round the circumference of one whirligig, every rotation sends off 100 prayers at once to Shakiamoonee; and, supposing 100 of these praying-mills, 10,000 prayers are sent off by a single rotation of these mills. This device does credit to Tartar ingenuity, and even surpasses that of the Jesuit, who, by running over the letters of the alphabet, contended that he repeated all the prayers that were ever composed out of it. These whirligigs are common over all Tibet, in the temples of China, amongst the yellow and black Mongols, and the Eluth Kalmucks, and are mentioned

by every traveller of note into these regions, as Turner, Bogle, Moorcroft, Timkowski, Gordon, Gerard, and others. As the supreme deity of the Boodhists lives in a state of infinite repose, like the god of Epicurus, all the operations of nature are performed by inferior agents. In consequence of this notion, Boodha or deity incarnated in his person is always represented in a sitting posture, denoting perfect repose. The Dalai lama and his vicar, the khootookhtoo, may be considered as repose personified, as wrapt up in a sort of mental abstraction, regardless of every external object, and seemingly totally divested of all passion or sensation. This is supposed to be the highest point of bliss, and every lama the more he succeeds in divesting himself of all the passions and appetites of human nature, the nearer he approaches to a state of absolute perfection and supreme bliss in *Neravana*, where all consciousness of individual existence is lost. The lamas are generally corpulent from their indolent life, and fatness is an indispensable requisite for the office as a proof of study and repose. Such a religion, in which indolent abstraction is considered a prime virtue, has a tendency to divest its followers of all energy of character; and, wherever it prevails, the people are in the lowest state of intelligence and activity of all the nations who profess polytheism.

Language and Literature.] Of all the languages spoken by the people of Asia, whether nomadic or fixed, savage or civilized, the Mongolian is least known,—a very surprising circumstance considering the great figure they once made on the theatre of history, and that it is a spoken language all the way from the Beloor to the Siolki, and from the wall of China to Southern Siberia. We have never yet had a grammar or lexicon of the language, as of Mandshoorian and Chinese, and all the knowledge possessed of it by Europeans, has been through the medium of these latter, or through the Toorkish. Remusat in his very learned and interesting work on the site of Karakorom and the geography of Central Asia, complains much of the want of a Mongolian dictionary. Such a work, says he, is an indispensable requisite for an accurate knowledge of the history and geography of Mongolia, as it would furnish the means of restoring the names of the cities, (as that of Karakorom for instance,) the rivers, and the mountains, of which in the maps (of the Jesuits) we have nothing but corrupted transcriptions, or translations in the Chinese, in the Toorkish, or in the Mandshoor languages.—See p. 56 of that work. Had the elder Des Guignes been acquainted with the Mongolian language, he never could have committed the monstrous error of confounding Huns, Turks, and Mongols together, and taking them for one and the same race, and continually giving Chinese translations of Toorkish names, as if Toorkish had been the only language used by the nomadic tribes of Central Asia. Before the time of Jenghis Khan, none of the nomadic tribes had an alphabetical character or written language, except the *Oigoors*, who alone of all the congregated host that followed his victorious banners, knew the use of letters, and therefore that Mongolian hero was compelled to employ them as his secretaries. But who these Oigoors were, is not agreed amongst the learned, most of whom, if not all, follow Abulghazi and Ebn Arabshah, as La Croix. Remusat, Klaproth, and others, have taken them for Toorks. But the learned Mr Schmidt, of the St Petersburgh Academy, has controverted this opinion, and has endeavoured from the Mongolian history, before mentioned, to show that the Oigoors were a Tibetian race, well acquainted with the language of Tibet, and the books of the Boodhists. If so, then the Mongols as they received their alphabeti-

cal characters from the Oigoors, owed their letters not to a Toorkish, but to a Tibetian tribe. It seems clear that the Oigoors were Boodhists, and had Tibetian lamas amongst them, and temples in honour of Chakiamoonee. It is also clear that the Oigoorian letters were the same with, or merely a variation of those called Tangootian or Tibetian, and therefore it is extremely improbable that the Oigoors were Toorks, as none of that race ever seem to have embraced or professed the religious system of Boodha. It is also clearly an established fact, that the Toorks had no written characters, no alphabet of their own, long after their emigration from Eastern Toorkistaun to the W. of the Beloor, and that at last they were forced to adopt the Arabic alphabet, used by the inhabitants of Bokhara and Samarcand, to express their spoken language. Now it seems very strange if the Oigoors inhabited Eastern Toorkistaun—as all the abettors of the common opinion maintain—and were really one of the Toorkish tribes, who, in common with their brethren the Wheyhoo, dwelt there, that they alone should possess the knowledge and use of alphabetical characters, and that instead of communicating such an important benefit to their own kindred tribes dwelling in their very vicinity, they should communicate it to the Mongols, the sworn enemies of the Toorkish race. The whole accounts of the Oigoors, lead us to conclude that they were a learned and polished race, compared with their Toorkish and Mongolian neighbours. The Chinese historians say, that the Oigoors understood the Chinese characters, had the books of Confucius, honoured the spirit of heaven, had many Bonzas (lamas), and followed the Chinese calendar. All these things appear exceedingly unlike a Toorkish tribe. It is the opinion of Schmidt, that the Oigoors, amidst the revolutions continually taking place amongst the nations of central Asia, were a tribe driven out of the Lesser Bukharia up into the lofty region of Tibet, where they learned the Tibitian language and religion. However this be, the Oigoorian alphabet, communicated to the Mongols, is essentially Tibetian. It was introduced by Tata-Tong-Ko, amongst the Mongols, in the latter period of the reign of Jenghis Khagan, and that hitherto ignorant race began to have some notion of history, and the Oigoors composed books for their service in the Mongolian language. After the reign of Jenghis Khagan, the Mongol princes employed in all their public acts the Oigoor and Chinese characters. But the emperor Khouvilai, who was a learned prince, thought it would be for the grandeur and glory of his nation, that it should have characters of its own. He therefore gave a commission to Pakba Lama,—called Pasepa by Gaubil in his history of the Ywen Dynasty, chief of the Tibetian lamas, who, before his elevation to that dignity by Khouvilai, was called Madi Douzava,—to compose an alphabet for the Mongols. This eminent personage, who was well-acquainted with the Tibetian, Oigoorian, Shanscrit, and Chinese characters, rejected the Chinese which represent the ideas of things, and thought only of those fitted to express sounds. Therefore out of the three other characters, he formed 1000 of the square form, with rules for pronouncing, shaping, and writing with them. This new alphabet, which succeeded the Oigoorian before used, was denominated Hor-Yig, or the new Mongol alphabet, which was ordained in February, 1269, to be used in all the courts of justice, and the Oigoorian from that time ceased to be used. An attempt had been made by Yeloo-Chootsay, prime minister to Mengko, to introduce the Chinese characters, but it failed. It may be remarked that the Mandshoorian language is expressed in the same character as that invented by Pakba Lama, as it also had no alphabet till this was

adopted for it, by orders of Kanghee. As it is affirmed that in the reign of Kouvilai, the Nyuche or Kin, and the Kitan or Lyau had alphabets of their own, distinct from the new Mongol characters, we must either infer that the Mandshoors are a different race from these, or that the above statement is erroneous, and Gaubil says he had never seen any as yet of the Kin and Kitan characters.[8]

Manners and Customs.] Like all or most of the pastoral tribes of Asia, the Khalkhas are divided into tribes or *aimaks*, and these are again subdivided into smaller bodies, each of which has its chief, called *taiki*, which title descends hereditarily to the eldest son. Such are all the nobility the Khalkhas have, and riches being pretty equally shared amongst them, there is no other difference between the head of one tribe and that of another, but merit, or the number of families in his oorga. In their physiognomy and personal appearance, the whole of the Mongol race differ from those of the Toorkish race, having flat noses, small oblique eyes, thick lips, and scanty beards, ears large and prominent, black hair, and reddish, brown, or yellow complexions. They shave off their hair, leaving only a small lock on the crown of their head, which falls down their backs, and is let grow to its natural length. In contrast to their homely looks, they have very pretty mouths, with small teeth, white as ivory, and are perfectly well limbed. Their women as having the same features, though not so large, are by no means beautiful, but are generally handsome and well-shaped. Their manners, as might be expected, are rude and unpolished, but they are honest and sincere, and not nearly so much addicted to plunder and robbery as the Mohammedan Tartars. Both the Khalkhas and Sharra Mongols are very nasty and slovenly in their tents and clothes, living amidst the dung of their beasts, which serves them for fuel, as they have no wood. Hence their tents have a rank disagreeable smell. Their general clothing is sheep and lamb-skins, the wool next the body. They know well how to dress and whiten these skins, as well as those of stags, deer, wild goats, and other animals, which serve the richer sort for under garments in the spring. Yet for all the care they take, the smell of a Mongol is felt whenever he draws near you, hence the Chinese call them Tsau-Tatse, the stinking Tartars. Red is the colour in greatest esteem, and however ill-clothed the taikis may be, in other respects, they never fail to have a red or a yellow robe for state-occasions. These chiefs would rather want a shirt, as a scarlet coat, and the women are as fond of a scarlet gown. But the Mongols generally have not yet enjoyed the luxury of shirts. Their usual food is the flesh of animals, as horses, dromedaries, oxen, cows, and sheep. Horse flesh is much esteemed. When Meng-ko succeeded to the throne of his grandfather Jenghis, in 1250, A.C., he made a feast of seven days, during which, 300 horses, as many cows, and 1000 sheep were daily killed, dressed, and consumed. But horse flesh and mutton is their general food, which is sometimes eaten with pease and beans. When they travel, a whole sheep is dressed in its own skin: the skin is then taken off and converted into a sort of bag, which they fill with water, along with the flesh stripped from the bones, and throw into it successively a number of stones red hot. The meat is thus completely cooked, and

[8] Mr Schmidt has published the Tibeto-Mongolian dictionary of Schang-dchah Khootookhtoo under the patronage of the emperor Nicholas; and a Chinese, Mongolian, and Mandshoorian dictionary, with a Russian and Latin interpretation, is actually publishing, or has been published at St Petersburg, so that the learned and inquisitive part of the public are now in possession of a key to the language and history of the Mongols.

the broth is excellent. Their sheep are very large, with remarkably fat tails, often two spans long, and about as much round, weighing commonly about 10 or 12 lbs. and consisting almost entirely of very rank fat. They abhor swine's flesh and poultry. In summer, however, their common food is milk variously prepared, as that of cows, mares, ewes, goats, and camels. Their usual drink is water, boiled with the worst kind of Chinese tea, in which they put cream, butter, or milk. But they are fondest of mares' milk, which is much better and richer than cows' milk. Their cows, after their calves are taken from them, will suffer none to draw their teats, and they also quickly lose their milk, so that necessity has in some measure introduced the use of mares' milk. From this milk, when fermented, a spirituous liquor is distilled, called *araka* by the Mongol, and *koumish* by the Toorkish tribes. This liquor is strong and nourishing, and they delight to get drunk with it. Oktay, the successor of Jenghis, died suddenly from a fit of hard drinking, which had lasted a whole night; and as Gibbon remarks, the disordered digestion of a rude barbarian, arrested the career of Batoo, and perhaps the subjugation of Europe. A similar debauch caused the death of Attila, and saved Italy from another devastation. At the inauguration of Meng-ko, 8 waggon loads of wine, 2 of brandy, and 20 of koumish or araka, were daily consumed. The Mongols, and indeed all the nomadic hordes of northern and central Asia, are like the Indians of North America, passionately fond of intoxicating liquors, for when they can get any, they drink till they are unable to stand; and when they have a mind to enjoy this pleasure, each brings what liquor he can procure, and then they set themselves to drink night and day, never rising till every drop is spent. Rubusquis abounds in narratives of Mongol drinking-bouts during his stay at Karakorom. They are equally fond of smoking. Polygamy, though allowed, is not common, and they marry very young. The women bring to their husbands a portion in sheep or cattle, and they prove generally active and industrious wives, as they tan the hides, comb and spin the wool, wash the clothes, cleanse the esculent roots, cure and dry the winter provisions, and distil the koumish or spirit of mares' milk. The husbands shoot the winged game, and hunt the animals which wander in great numbers over the vast desert. When the pasture begins to fail, all the tribes strike their tents, which takes place ten or fifteen times in a year. In summer they move northward, and in winter southward. The flocks, the men, the women, and the children, form a regular procession, followed by the young women, singing cheerful songs. The camp and not the soil is the native country of a genuine Tartar. Within its precincts, his family, his companions, his property, are always included; and wherever he marches, he is always surrounded by the objects which are dear or valuable, or familiar to the eye. As the nomadic life is comparatively a life of idleness, they have abundance of leisure unmixed with care, or servile and assiduous toil. But this leisure is devoted to the violent and sanguinary pleasures of the chase, and their horses, strong and hardy, are equally fitted for war or hunting. Horse-racing, is a favourite amusement, in which even the young women excel. Other amusements are archery, wrestling, pantomime, and singing generally performed by young women and accompanied with the violin and the flute. Gambling, especially chess-playing, is a most favourite amusement. They have no houses but tents, small and of an oval form, but those of the more wealthy are a sort of wooden palaces, so large as to be fixed on large waggons, and drawn by a team of 20 or 30 oxen. In the days of Rubusquis, these houses were 30 feet in diameter,

projecting on each side 5 feet beyond the wheels. Over the felt, they laid mortar, marle, or bone ashes, to make it a clear white, adorning the roof with beautiful pictures, and hanging before the door a felt carpet painted with birds, beasts, and trees. He counted 22 oxen drawing a cart, 11 to a side. The axletree was as large as the mast of a ship, and the driver stood at the door of the house. Their household stuff and treasure were kept in square wicker chests, rounded at top, and covered with felt, greased over to keep out rain. They were adorned with paintings, or feathers, and fixed on carts carried by camels for crossing rivers, but never taken down like the houses. These houses when set down, are placed, as all their habitations are, with the door facing the south, to avoid the cold north winds, so very piercing over all this region; then the chest carts are ranged at a small distance on each side, as it were two walls. One rich Mongol had 200 carts with such chests, so that his court seemed a great village. The tents are all round and conical, having an aperture at the top to let out the smoke, which ascends from the hearth placed in the middle underneath. The tents of the chiefs are hung with silk stuffs in the interior, and the floors covered with Persian carpets. Silver and porcelain vessels are used in the tents of the great. The Mongols burn their dead, especially the bodies of their chiefs and lamas, and inter their ashes on some eminence, over which they raise an obo or cairn of stones, on which are mounted small flags or banners.

Cities.] Cities are not to be expected in the territories of nomadic tribes. Such are neither sufficiently numerous, nor rich, nor industrious as to build them. Like the patriarchs of olden time, the Mongols have no fixed place of abode. Even the famous *Karakorom*, the capital of the vaunted but imaginary Prester John and his conqueror the mighty Zingis, was built of earth and wood, and has left no vestiges of its past existence. Geographers and historians have been sadly puzzled where to find its site; and some, as Malte Brun, have supposed it to have been merely a summer abode of the Karait and Mongolian Khans, like that of Zheholl, where the emperor or khan long received the British embassy. But there are no grounds for such an opinion, as its existence both as a summer and winter residence of its nomadic lords, is incontestibly proved by all authorities, whether Chinese, Toorkish, or European. It is, however, no matter of surprise, that travellers have not found its remains, considering the nature of its frail materials, earth and wood. On the contrary, it is rather surprising they should have expected to find them. From this want of ocular proof, no other mode of knowing its site, but that of such historical notices as could be gleaned from the meagre accounts of oriental authors, and the Chinese records, remained. But these researches, though the combined results of the labours of a Gaubil, a Souciet, a Des Guignes, and a D'Anville, have all proved fruitless, and the inquiry terminated just where it began [9]

[9] So obscure is the subject, and so few are the remains of any thing that bore the resemblance of ruins, or a ruined city, that wherever such were found, the conclusion was drawn, or at least the conjecture was made, that such marked the site of Korakorom. The Jesuits who surveyed Mongolia, imagined it to be Kara Usson, in the vicinity of a ruined city, called Para Hotun, Lat. 48° 4′ 48″ N. long. 2° 49′ 30″ W. of Peking, Gaubil fixed it 420 miles S.W. of the above supposed site, in 44° 21′ N. lat. and 10° 11′ W. of Peking, by computation on the Onghin Muren, near the lake Kurahan Ulen. See Souciet *Mathem. Observa.* page 185. D'Anville followed Gaubil in this statement, implicitly: for, says he, that place which remained unrecognized in the maps sent from China, is determined by an astronomical observation in the latitude, and respecting the longitude from Peking, there is not one point of difference. This observa-

History.] It is impossible to determine the different races of the various nomadic hordes, which at different times bore sway in Northern Mon-

tion it seems was made by some Chinese astronomers sent in 1279 by Khouvilai to make observations in Mongolia, at the request of the imperial astronomer Kouo-cheou-king, and in this Chinese report, Karokorom is called *Holin*, that is, the *Black City*. Unfortunately for the credit of this Chinese observation, there is more than a degree of difference between the height of the pole and the shadow of the gnomon, which is sufficient to overthrow all the authority of the mathematicians employed by Kouo cheou-king to fix its situation. Prefixed to the first volume of the history of the Mongols, written in Chinese, by Youan-phing, is a map of Tartary and the Great desert, with an explication in the form of a note on the different places, where the Mongol princes kept their court, at different epochs. Des Guignes, in his history of the Huns and Turks, has given two itineraries to Karakorom, from Pi-low-tai on the N. bank of the Whangho in the northern part of the country of the Ortous Tartars, in 40° 37′ 16″ N. and 7° long. W. of Peking, and adds the remark, that these different routes well accord with the position which M. D'Anville has assigned Karakorom in his maps. Mr Remusat in his very learned memoir on the site of Karakorom, having compared these routes together, and with the chart above mentioned, given in the Chinese history of the Mongols, and the explication given in the note of the different places where the Mongols held their court at different epochs, has found, in addition to the erroneous astronomical observation of the Chinese astronomers, so pompously given by Gaubil and Souciet, and followed so implicitly by D'Anville, that the two routes given by Des Guignes, out of the Thang-cheou, will not, nor can agree at all with the position assigned it by D'Anville, as Des Guignes asserted, for these routes give a distance of more than 700 B. miles from Pi-lou-tai to Karakorom, whereas by D'Anville's map it is only a third of that distance in a direct line, from Pi-lou-tai, and that in a country flat, desert, and without rivers, and consequently where the windings can neither be many nor great. Des Guignes has, besides, in his extract from the Thang-chou, from the effect of carelessness which is scarcely conceivable, nimbly slipped over many remarkable particulars there contained, and passed, *sub silentio*, over all that which was sufficient of itself to prevent mistake and dispel error. The part which he has suppressed, is as follows: To the E. of that city, (the capital of the Whey-hoo or Karakorom,) are uncultivated plains. To the W. it reclines upon the mountain Ou-te-kian, to the S. it touches the bank of the river Wen-kouen, to the N. 6 or 700 ly distant, appears the river Sian-o. Upon the northern bank of that river, is the city of Sou-kouei. In going more to the N. and a little to the E. appear mountains covered with snow, and forests of pines, and birches, and a lake with many springs. At the two sides of the Ou-te-kian, are the rivers Wen-kouen and To-lo. These two rivers in making a great circuit, run to the N.E. from the capital of the Whey-hoo, and unite at the distance of 500 ly. To the N.E. more than 1000 ly is the lake Kiu-lun, the four sides of which are peopled by the Chi-wei. We have given just so much of what Des Guignes has suppressed as is sufficient to point out the site of Karakorom. The position of mount Ou-te kian is wholly unknown to us; but as that mountain lay to the W. of Karakorom, it undoubtedly made a part of the eastern chain of the Altaian mountains; and there is every reason to believe, that it is the same mountain of which mention is made at the commencement of the history of the Whey-hoo, under the names of Yotou-kiau, I Tou-wey-kian, and it is possible that these very names are none other than varied alterations of Tou-kin, which is that which Matouanlin has given to the mountain where dwelt the Khagan of the Turks. It was about the environs of that mountain where the Tchen-yoo of the Heeong-noo anciently reigned. The most western part of this mountain Tu-kin, is, according to Gaubil, about 50° N. and 17° W. of Peking, and the chief mountain belonging to it, in 46° 50′ and 11° 38′ W. of the same meridian, and its most eastern part, in 46° N. and from 12° to 13° W. of that same city. The Wen-kouen is clearly the *Orkhon*, a name which the Chinese cannot exactly express, and which they also sometimes call Kouen and Wang-ki. The Sian-o is the Selingha. Respecting the To-lo, there can be no difficulty in recognizing it as the Toola. The confluence of the Wen-khouen (Orkhon) and To-lo (Toola) is placed at 500 ly, or 50 leagues to the N.E. of Karakoram, and the Kiu-lun lake is the sea of Baikal. If we examine the 8th sheet of Chinese Tartary, we shall find the remains of a place called Talarho-kara-balgasoun, 50 leagues S.W. of the confluence of the Orkhon and Toola, which seems corrupted, but in which the words *kara* (black), and *balgasoun*, (city), are found, which correspond to those of the Turkish Kara-koroum and the Chinese Holin, 'the black city,' or 'city of the black river.' This place is in 47° 32′ 24″ N. and 13° 21′ 30″ W. of Peking, and 150 geographical miles S.W. of Dorga, on the Toola, the present capital of the Khalkhas. In the time of the Mongols, when they had obtained some of the knowledge of the Chinese, we see Karakorom, or Holin, situated to the E. of one of the branches of the Altai, to the S. of the Selinga, to the N. of the Orkhon, and to the W. of the Toola, near that point of Tartary where the rivers diverge to different seas. It would prove tedious to detail all the proofs, that Karakorom was far to the N. of the position assigned it by Gaubil, Souciet, and D'Anville, and that it was very probably the same with the ruined city of Talarho-kara-balgasoun, a

golia, which seems to have been peopled anciently with Toorkish as well as with Mongol tribes: sometimes the one race prevailed, and sometimes the other. But whatever dynasty was for the time lord of the ascendant, whether the Heeongnoo, the Whey-Hoo, the Kin, or the Mongols, the different races were united under one conqueror. But as these dynasties were composed of princes, or tanyoos, or khans, as savage and illiterate as their subjects, we have no accounts of them but from their neighbours the Chinese, who seem never to have had sufficient knowledge to discriminate one race from another, but confounded them all under the sweeping appellation of *Ta-tse*. Hence the very learned but fanciful Des Guignes, who knew only the Eastern Tartars, or Mandshoors, and the Western Tartars, or the Turks and Mongols, believed these latter to be the same race, and that the Mongols were the descendants of the former, whom he makes to

little to the N.W. of the Orkhon. There is another ruined city to the N. of this and the Orkhon, named Baisiri-Bouritou, (the Paysheri Puriton of the Jesuits' map,) in 48° 23′ 50″ N. and 13° 29′ W. of Peking, which may also correspond to the site of the ancient Karakorom. It is, however, but conjecture; for, till we have its Mongolian name, we cannot be certain of its identity, the names in the map being Mandshoorian or corrupted Turkish. Rubruquis traversed the country of the Naimans, where Khayouk had his residence, and *pursuing his route by the high country* towards the N., he arrived at the court of the great khan, ten days' journey to the W. of the country of *Onan Cherule, which is the peculiar and true country of the Moal* (Mongols), *where was the court of Kings*. That name of Onan Cherule has been well restored by Fischer, in his history of Siberia, who saw that it indicated the country watered by the two rivers, Onon and Kerulon, or Kerlon, between which the Mongols actually dwelt. Had Karakorom stood where D'Anville has placed it, this could not have been true. Marco Polo, after he has described the cities of Soutcheou, Kantcheou, and Etzine, places to the N. of this last ruined city a great sandy desert of 40 days' journey; and after having passed it, says he, we arrive at the city of Karakorom, where the Tartars drew their origin. These 40 days required to pass the desert are unquestionably a great exaggeration. But that exaggeration would be doubled if the breadth of the desert only had separated Karakorom from Etzine, and if, consequently, these two cities were only 100 leagues distant from each other, as these are delineated in the maps of D'Anville. Fischer placed it to the S. of the Orkhon, in 47° N. and 103° E., whereas we have seen that it lay to the N. of that stream. But his conjecture is far less absurd than that of D'Anville, which actually placed it, if we may so speak, in the very heart of the kobi or desert—a most unfit place for either a camp or a city. Murray has fixed its position far W. in the country of the Eluths, in Soongaria. The annotator of Abulghazi placed it near the sources of the Jenisea and the Selinga. Ebn Said and Abulfeda placed it in 116° 40′ E. of the Fortunate islands, Al Harair in 115° E., father Ricci in 17° W. of Peking, and father Visdelou, in his history of Tartary, in 20° W. of the same meridian. According to a Chinese history of the Mongols by Youanphing, Holin, or Karakorom, derived its name of Holin, or 'the black city,' from the river Ha-la-Holin, and that it was built by Pi-kia, khan of the Whey-Hoo, who lived in the middle of the 8th century under the Tang dynasty. An ancestor of Pi-kia, named Phousa, of the family of Lo-lo-ko, was chosen for the first time to be the khan of the Whey-Hoo, which then dwelt on the Selinga river; but he fixed his camp on the banks of the Toola in 628,—and his descendant, Kou-lou-lou Pi-kia, fixed his camp, in 735, where Holin or Karakorom afterwards stood, and which then became the capital of the Whey-Hoo, as afterwards of the Karaites, under the Vang khan, and then afterwards of Zingis Khagan and his successors. When or by whom Karakorom was finally destroyed, we are not told, but probably in the wars which took place between the Eluths and Khalkhas. Remusat expected to find a full account of the site of Karakorom in the Pian-i-tian, or foreign geography of the Mandshoors, but was sadly disappointed to find almost nothing on the subject, after a rapid reading of that work, which he was permitted to do by the kindness of Klaproth, who lent him the work, as the Dai-sin-i-toundchi, it seems, is not in the royal library of Paris. But, however dignified it might be as the regal abode of the khans of the Whey-Hoo, or of the Mongols, it was still but a village, less than the town of St Denis, near Paris,—and the whole palace of Mangoo was scarcely equal to a tenth part of the Benedictine abbey. It then contained only two streets, one for Chinese mechanics, and another for Mohammedan traders; and the places of religious worship, as one Nestorian church, two moschs, and twelve Boodhist or Shaman temples, may in some degree, as Gibbon remarks, represent the number and degree of its various inhabitants. Yet this acute and critical historian seems to have felt no difficulty respecting the site of Karakorom, but to have reposed perfect confidence in the oracular decisions of D'Anville and Des Guignes.

be the Heeongnoo of the Chinese, and the celebrated Huns of the Byzantine historians; or, in other words, that the Huns, Turks, and Mongols, were just so many appellations of the same nomadic nation. This capital blunder, of confounding the nomadic tribes of Central Asia together as one mass, as speaking the same language, having the same generic features, pervades his whole work on the origin and history of the Huns and Turks; and this, together with the indistinctness of his Tartarian geography, renders his elaborate and erudite work of comparatively small use. The historic period of Mongolic history does not commence till the latter end of the 12th century, when they were known first under the name of Peti, and afterwards of Mongoo or Mongol, from the predominant tribe, to which their hero Zingis belonged. At that time the Mongols were subject to the khan of the Karaites, called the Vang khan, or sovereign of all the nomadic tribes of Mongolia, and who was himself a subject of, or tributary to, the Kin sovereigns of Northern China, as the very term intimates, Vang being the Chinese title at this very day bestowed on the khan of the Khalkhas by the present Mandshoor sovereigns of China. This Karaite prince held his court, such as it was, at Karakorom; and as his horde inhabited the banks of the Ha-la-Ho-lin Orkhon, or 'black river,' it probably derived the appellation of Karaite, or 'black horde,' from that circumstance, or 'the people of the black river.' The father of Temujin (his real name, for that of Zingis Khagan was his subsequent title) Yesukai reigned over 13 hordes, whose united numbers composed about 30 or 40,000 families, who fed their flocks in the mountains and valleys that environ the sources of the Kerlon, the Toola, and the Onon. Temujin himself was born in 1162, on a mountain near the Onon, and was first called, according to the Chinese, Kyewen, but afterwards Temujin, from the chief of another Mongol horde, whom Yesukai had vanquished. Temujin having lost his father when a boy, two-thirds of his paternal hordes refused to obey him, and at the age of 13 he was compelled to take the field against his rebellious subjects. The future conqueror of Asia was reduced to fly and to obey; but he rose superior to misfortune, and in his fortieth year had established his fame and his dominion over all the circumjacent tribes, and at last defeated the Vang Khan himself in a sanguinary battle, between the Toola and Kerlon, and the skull of the vanquished khan, enchased in silver, was placed on the throne of Temujin, with its face to the door, as a warning to the boldest of his foes. This victory put him in possession of Karakorom, and all the dominions of the Vang Khan, a prince who, under the name of Prester John, had corresponded with the Roman pontiff and the princes of Europe, though there can be little or no doubt of the spuriousness both of the title and the letters, as the Vang Khan himself could neither read nor write. His subsequent victory over the khan of the Naimans in the mountains of Khanggai confirmed his power, and paved the way for his future installation under the appellation of *Zingis Khagan*, 'the most great khan.' This solemn act was performed in the year 1206, in a general *kouroultai* or diet held near the head of the Onon, between it and the upper course of the Kerlon. There, in the presence of an immense multitude, Temujin, seated on an eminence, made a speech exactly adapted to their taste and feelings. The multitude then, by their khans, set him on a black felt carpet spread on the ground, and then a person appointed to give their suffrage told him that his power came from God, who would not fail to prosper him in case he ruled well, but if he ruled otherwise he would

render himself as miserable as the black felt on which he sat intimated to him. After this remonstrance, seven khans lifted him up with an air of ceremony, and bore him to a throne prepared for the occasion in the midst of the assembly. Then they proclaimed him the supreme khan of all the Mongol tribes, and performed the nine prostrations in token of the most profound obedience; after which all the multitude did the same, with acclamations of joy. To render the ceremony more impressive on the uninstructed and superstitious multitude, a naked Shaman prophet, prepared for the occasion, came into the assembly, advanced to the throne, and declared that he came from heaven, whither he was accustomed to go on a white horse to converse with the Deity, to tell him that henceforth he should take the name of *Zingis* or 'the most great,' and order his subjects to call him so, and predicted at the same time that all his posterity should be khans from generation to generation, and that God had given the whole earth to the son of Yesoukai. The Chinese accounts do not, like those of the western historians, Abulghazi and De La Croix, say that he was proclaimed emperor of the Mongols and Tartars, as if these were two distinct nations; for these latter were, according to De La Croix himself, called Soo-Mongols or Water-Mongols, and could not, therefore, be Tartars, and, moreover, dwelt alongst the Onon river, and as far S.E. as the Biur-Noor, called Biurnavir in Abulghazi, who, from his ignorance of the Mongol language and geography, makes it a country and not a lake. From the date of Temujin's installation in 1206 as supreme khan, the Chinese historians commence the era of the Mongol empire, and the Ywen dynasty. Zingis now commenced a career of victory and conquest unparalleled, save by those of Alexander, in all preceding history, to narrate which would require a volume. By his own arms and those of his generals he successively reduced all the hordes who roamed between the wall of China and the Wolga, whether of Mongol or Turkish descent. The powerful tribe of the Oigoors submitted voluntarily to his arms, and this event was soon followed by the invasion of the Kin empire. Zingis was now become sole monarch of the pastoral world, the lord of many millions of shepherds and robbers, who, conscious of their united strength and their own poverty, were impatient to seize the wealth of their southern neighbours, the industrious, but unwarlike Chinese. The ancestors of Zingis had, in common with their rival khans, been tributaries of the Kin emperors, the Altoun khans of the western historians, and even Zingis himself. He now not only refused the usual tribute, but also, by the mouth of an envoy, demanded tribute and homage from the *son of heaven* to the *lord of nations*. On the refusal of the Kin monarch, Zingis, with his innumerable squadrons of Mongol cavalry, pierced on all sides the feeble rampart of the great wall. Ninety cities were stormed or starved by the fierce invaders, ten only escaped, and the invasion was seconded by the revolt of 100,000 Keetans, who guarded the frontier on the side of Lyautong. The son of heaven felt his inability to contend with the lord of the shepherd race, and a princess of the celestial house; 3000 horses, 500 youths, as many virgins, and a tribute of gold and silk, procured a short respite. In his second expedition, Zingis compelled the Kin emperor to retire beyond the Yellow river to a more southern residence. Peking sustained a long and laborious siege, but was finally taken by mining, and the conflagration of the palace lasted above 30 days. China was desolated by war and internal discord, and the five northern provinces were added to the empire of Zingis. Turning his arms to the W., he subdued the whole of Eastern

Toorkistaun, then subject to the Kara-Keetans, till his progress was terminated by the range of the western Imaus. In that direction his dominions bordered on those of Mohammed, sultaun of Karazm, who, by a rash, unjust, and inhuman deed, provoked the resentment of Zingis, and the invasion of western Asia. A caravan of three ambassadors, and a hundred and fifty merchants, sent by Zingis to open up a commercial intercourse with the most powerful of the Moslem princes, were arrested and murdered at Otrar by the command of Mohammed himself, or, as others relate, by order of Gayer Khan, the governor. The number of merchants thus massacred is stated by others at 450. Only one escaped to carry back the relation of the horrid deed to the Mongol conqueror, who sent three ambassadors to the sultaun to demand satisfaction, which was not only denied, but even the ambassadors themselves were murdered. It was not till after this denial, and fresh murder of persons whose legantine character is held sacred amongst all civilized nations, till after he had prayed, and fasted, and wept three successive days on a mountain, that Zingis had recourse to arms, and invaded the Western Asia. Mankind have been doomed to suffer much from the ambition, the ingratitude, the injustice, the cruelty, and the oppression of princes; but nowhere, in all the page of recorded events, did the human race suffer so much as did Western Asia from the conduct of Mohammed, and more than 600 years have not yet been able to repair the ruin of this Scythian irruption. Above 700,000 warriors, fierce for victory, and conquest, and plunder, and blood, composed the congregated host of khans and tribes which marched under the banners of the modern Attila, and the famed field of Karakoo decided the fate of Mohammed and the destiny of Asia; more than 160,000 Karasmians bit the dust, and Mohammed himself, astonished at the number and valour of the shepherd-warriors, fled from the scene of combat, convinced, but too late, of his fatal mistake. Unable longer to contend in the open field with such veteran foes, he distributed his troops in the frontier garrisons, hoping that the barbarians, however invincible in the field, would be unequal to the task of besieging and taking towns. But in this expectation he was also mistaken. In their two wars with China, the Mongols had been well schooled in the science of sieges, and Zingis, who was as knowing as he was ambitious and brave, had formed a body of Chinese engineers skilled in the mechanic arts, and fully competent, as things then stood, to direct and manage the operations of a siege. One city after another was taken by the victorious Mongols in spite of every effort of defence, and the successive sieges of Otrar, Jund, Zarnuk, Tashkunt, Tonkat, Khoojund, Bokhara, Samarcand, Oorgunge, Fenakunt, Termed, Balkh, Baumeeaun, Saganak, Uzkund, Talcan, Maroo, Nesa, Herat, Neeshapoor, Noor, Damghaun, Kaender, Ghazna, and Kandahar, swell the page of conquest and blood, and attest the patience, and skill, and prowess, of the modern Scythians. The destructive inroads of the fierce Attila and his desolating Huns, who boasted that the thicker the grass, the easier it is mown, and that it never grew on the spot where once their horses had trod, are not once to be compared to those of his successor Zingis; and it is sufficient to say, that from the Beloor to the Caspian, and from the Caspian to the Indus, a tract adorned with the habitations of man, and with the arts and labours of millions, was so completely ruined, as not even yet to have recovered from the effect of this direful visitation, this outpouring of the vials of Divine wrath. The downfall and death of Mohammed, and the ruin of his house, are but a poor atonement for those

calamities which his conduct produced. Could the ruin of his house and the calamities of Asia have been averted by a human arm, it would have been accomplished by that of his son the heroic Gelaleddin, whose active valour repeatedly checked the Mongols in the career of victory. Retreating as he fought to the banks of the Indus, he was oppressed by their innumerable host, till, in the last moment of despair, he spurred his horse into the waves, swam one of the broadest and most rapid of the rivers of Asia, and extorted the admiration and applause of Zingis himself:

If by a mortal arm, his father's throne
Could be defended, 'twas by his alone.

It was here the Mongols, like the soldiers of Alexander on the banks of the Hyphasis, weary with marching and fighting, and loaden with wealth, sighed for the enjoyment of their native homes, and Zingis reluctantly consented to lead them back. Encumbered with the spoils of Asia, he slowly measured back his steps, recrossed the Hindookoosh, and repassed the Oxus and the Iaxartes, where he was joined by two of his generals whom he had sent to subdue Western Persia. These had accomplished their errand, and on their return had trampled on the Georgian and Caucasian mountaineers who had dared to oppose their march, passed the gates of Derbend, traversed the desert of Astracan, crossed the Volga, the Jaick, and the Yem, and accomplished the entire circuit of the Caspian sea,—a feat which, in the history of military marches, had never been attempted, and has never been repeated. The return of Zingis to his native Mongolia was soon followed by the conquest of the kingdom of Hya, called Tangut by the western historians, a Tartar monarchy, which had subsisted nigh 280 years, to the W. and N.W. of China, and comprehended most of the province of Shensee, the country of the Ortoos Mongols, the country of Kokonor, and what is now called the province of Kansoo, N.W. of Shensee, and the country of the See-fan or Too-fan. This conquest was accomplished in two campaigns, and the cities of Etzine, Kampion or Ninghya, the capital, Khyayuquan, Kanchew, Suchew, Ganchew, Seeleeang, Lingchew, Shachew, Quachew, Hochew, and Sining, were successively reduced, and Lee-hyen, the last monarch, who had surrendered at discretion, and gone to make his humble submission to the victor, was slain, with all his family and domestics, as soon as he had left his capital, Ning-hya, which was given up to indiscriminate plunder by the inhuman Mongols. Not two in a hundred, according to the Chinese, escaped the general massacre; the plains of Heca were sown with dead bodies, and the caves, mountains, and woods, filled with miserable people, who fled thither to escape the destroying sword of Zingis. The entire ruin of the Toofan, once a powerful state on the frontiers of Tibet, Sechwen and Shensee, was consummated in that of Heca in 1227, and finished the sanguinary career of the ferocious Zingis, who died a few days after he had ordered the murder of the king of Heca with all his family. This took place in the 21st of his reign, and 66th of his age, full of years and sanguinary glory. He was possessed of all the properties which constitute a hero. But his genius, like that of heroes, was not the genius of benevolence, but of blood; it was genius guided by boundless ambition, and the love of domination; and the last moments of his existence were spent in exhorting his sons to complete the conquest of China. Never before had such a conqueror appeared on the stage of time. His conquests far outstripped those of the hero of Macedon and the Arabian conquerors both

for rapidity and extent, as they extended in a longitudinal direction from the sea of Eastern Tartary to mount Zagros, and from the Whangho to the frozen regions of the north. Hence he is with justice acknowledged in this respect to be the greatest prince that ever filled a throne, or wielded the sceptre of imperial power; and it was in the pride of victory and conquest, that the son of an obscure khan, and the khan of a petty tribe, was believed to be the descendant of the gods, and to have derived his existence from the immaculate conception of the virgin Alankawa. But there can be no doubt that as a hero he fills the highest niche in the temple of sanguinary fame; for the Chinese historians tell us, that in the first 14 years of his reign, or from 1206 to 1220, B. C., there were 1,847 myriads or 18,470,000 persons slain by this inhuman conqueror; and if this be an exaggeration, they are supported in it by all the historians of Western Asia. After his death, the tide of victory, conquest, and death, continued to flow for 68 years with undiminished violence; for the Mongols subdued almost the whole of Asia, and the half of Europe. The Kin dynasty of Northern China was annihilated in 1234 by Oktay, the son and successor of Zingis. The dynasty of the Song, which possessed the largest and best part of China, called Mangee, or the south, survived for 45 years the fall of the Kin. The celebrated Mengkong, general of the Song, was while he lived the support of that dynasty and of Chinese independence, and for more than 12 years kept the Mongols completely at bay. But his death proved the ruin of the Song, as they had not a commander to fill his place, and the Mongols made continual though tardy progress, till in 1279, the last emperor, an infant, perished in the waves, and in the arms of his general, and the whole empire, from the wall of China to the frontiers of Tonking, submitted to Kublay Khan, the greatest prince of the Ywen dynasty. The circumjacent kingdoms of Korea, Tonking, Cochin China, Tibet, and Burmah, were reduced to different degrees of tribute and obedience by the effort or terror of the Mongolian arms. In 1255, the S.W. part of Yunnan, bordering on Tibet and Burmah, and then independent, was subdued, together with Tibet itself, by Hulyang-Hotay, the Mongol general. These conquests consumed five years, and of 100,000 Mongols, whom Hulyang-Hotay took with him to Yunnan, not 20,000 returned. In that expedition he conquered, after quitting Tibet, the countries of Karadjang, or 'black men,' Tchagan-djang, or 'white men,' the Lolos, the Abe, and the A-lou, and subdued 5 fortresses, 8 foo, four principalities (kiun), and 37 tribes of barbarians. In 1258, Persia was subdued by Hoolakoo, Bagdad stormed and sacked, and the last khalif Motasem was put to death. But the complete extirpation of the assassins of Roodbar by the sword of Hoolakoo was a service to mankind. The tide rolled on to the W. to Armenia and Anatolia, both of which were subdued, and the last sultaun of the house of Seljook was extirpated by the khaun of Persia, the successor of Hoolakoo. A curious journal of the march of Hoolakoo, from Karakorom to Kaswin, is given by general Kokan, and preserved in the Chinese history of the Mongols. It appears from that itinerary, that the army crossed the Khanggai or Altaian range, which occupied seven days' march, and that the road from Karakorom continued to ascend the whole way for the space of 500 ly or 50 leagues, at the end of which it begins to descend. The Khanggai is represented as extremely cold, and that in the greatest heats the snow never disappears. The whole way is mountainous and rocky, and there are a vast abundance of pines. In 1235, the Mongols under Batoo, grandson of Zingis, 500,000 strong,

set out for the conquest of the countries N.W. of the Caspian, and such was the rapidity of his marches and ardour of his innumerable squadrons, that in six years he had measured a line of 90 degrees of longitude. The whole of Northern Turkistaun and Kaptschak was overrun, the kingdoms of Astracan and Casan shared a similar fate, the most secret recesses of the Caucasus were explored, and a permanent conquest of Russia was effected, and the capitals of Kiow and Moscow were laid in ashes, and the Russians held under a servitude of 200 years. So complete was the subjugation of Russia, that the descendants of Ruric were compelled, as humble vassals, to bring their tribute on foot, and present it humbly to the representative of the khan on horseback, to make the nine prostrations to the khan, offer him milk to drink, and if any drops of it fell down, to lick them up. Then Poland was overrun, and in the battle of Lignitz, Batoo defeated the dukes of Silesia, the Polish palatines, and the grand master of the Teutonic order, and filled nine sacks with the right ears of the slain. Hungary next shared a worse fate, for the Carpathians, like the wall of China, proved but a feeble barrier to these barbarians of the East. The whole country was lost in a day, and depopulated in a summer, and the ruins of cities and churches were covered with the bones of the Hungarians, who expiated the sins of their Turkish ancestors. Gran, to the S. of the Danube, then the metropolis of the country, was besieged, stormed, and taken by the Mongols, who had crossed the river on the ice, and of all the cities and fortresses of Hungary three only survived this dreadful calamity, and Bela, their unfortunate monarch, hid his head amongst the islands of the Adriatic. The Mongols advanced as far as Newstadt, near Vienna, but the news of the approach of a German army saved the place, as the Mongols retreated from the Danube to the Volga, wasting in their way the adjacent kingdoms of Bosnia, Servia, and Bulgaria. A Russian fugitive carried the alarm of invasion to Sweden and the remote nations of the Baltic, and the ocean trembled at the approach of the Tartars, and so great was this terror that the inhabitants of Gothea (Sweden) and Friesland were prevented from sending, as usual, their ships to fish off the English coast, and as there was no exportation, the price of herring fell so low that 50 of these could be got for a shilling. Even the poor and frozen regions of the north attracted the arm of conquest, and a horde of 15,000 families was led by Sheebanee Khan, the brother of Batoo, into the wilds of Siberia, in 1242, and his descendants reigned near Tobolskoy for more than three centuries, till the Russian conquest under the Cossack Yermook Timofiof. Nothing but the sudden death of Batoo, in a second march to attack the capital of the Cæsars, saved Constantinople from the horrors of a siege, or the still more dreadful catastrophe of a storm. But the fury of the tempest at length abated, the tide of conquest gradually recoiled, and the barbarous hordes of Central Asia were finally unable to preserve what they had won. In every invasion, the Toorkish or Mongol hordes, call them which we will, have been uniformly actuated by a sanguinary, savage, and destructive spirit. They destroy every thing, but repair nothing. When the Mongols had subverted the empire of the Kin, and conquered the northern provinces of China, it was seriously proposed, not in the hour of victory and passion, but in calm deliberate council, to exterminate all the inhabitants of these provinces, and convert the whole of the land into pasture and hunting-grounds. But this inhuman measure was prevented by the wisdom and firmness of one man, Yeloo-Chootsay, a Keetan by birth and a mandarin by office. He represented to his savage master, the inhuman Zingis, that the

four provinces he already possessed, Petchelee, Shantong, Shansee, and Lyautong, would annually produce, under a mild administration, 500,000 ounces of silver, 400,000 measures of rice, and 800,000 pieces of silk, and that it was a much wiser measure to preserve an industrious population, and reap the fruit of their toils, by moderate taxation, than to massacre them. His advice was adopted, and the counsels of this friend of his country and of mankind saved the lives of unoffending and industrious millions. It is a perfect refreshment to one wearied out with the sanguinary tales of victory, blood, conquest, and destruction, to find such a character. It is one of those green spots in the desert of detailed warfare, which delights from contrast to the surrounding cheerless waste. The counsels of this man, who for 30 years was the prime minister of Zengis and Oktay, that at length humanized the victors, and made them, of savages, civilized, and inspired them with a love of the science and arts of their conquered subjects; and the reign of Kublay Khan is the only bright spot in the gloomy annals of the Mongols. Yet this great prince became a convert to the atheistical system of Boodh, and a dupe of the Tibetian lamas and Chinese bonzas. His successors on the throne of Khan-Baligh polluted the palace with a crowd of eunuchs, (the usual bane of oriental despots), physicians, and astrologers, whilst 13 millions of their subjects perished by famine in the southern provinces of China in 1334, in the reign of the last Mongol emperor, Shun-tee In 1352, Hong-voo, the founder of the Ming dynasty, commenced a successful rebellion in the province of Kyanggnan. His original name was Choo, a man of low origin, and a servant of a Bonzaic monastery, but one whose character admirably fitted him, in this political juncture, to overturn a degenerate and worthless dynasty, which he accomplished, after a warfare of 16 years, in 1368, and drove the Mongols quite out of all China, and their emperors were henceforth lost in the oblivion of the desert. His second successor, Yong-loo, in three successive expeditions, drove the Mongols beyond the Kerlon, the Toola, and the Amoor, into the mountains of Kinggan. The Mongols never ceased, however, to make inroads into China and recover their lost empire, but all proved unsuccessful, and we hear no more of these irruptions after 1582, but they have since lived quietly, feeding their flocks after the manner of their rude ancestors, previous to the era of their great founder Jenghis Khan. The subsequent history of the Khalkhas has already been discussed.

CHAP. II.—SOUTHERN MONGOLIA, OR THE COUNTRY OF THE SHARRA OR YELLOW MONGOLS.

This is a very large region, extending from the 124th degree to the 142d degree of longitude E. of Ferro, and from the 38th to the 47th degree of N. latitude, so that its length, from the borders of Mandshooria on the E., to the parts over against Ninghya on the W., is full 900 British miles, and 600 B. miles from N. to S., though not every where so broad, as may be seen on consulting the maps of Du Halde. As we mean to be very brief on this part of Mongolia, we shall merely give a short abstract of its geography and other things pertaining to it, without entering into formal details. This tract lies entirely to the S. and S.E. of the Shamo or great desert, which separates it from the territories of the Khalkhas, to the W. of the Mandshoors, and immediately to the N. of the Great wall.

This territory is full of mountains, especially to the E. and S. and is interspersed with rivers, as the *Whang-ho*, which passing out of Shensee to the N.E. surrounds the country of the Ortoos Mongols, and then re-enters China, forming the boundary, as it goes S., between Shensee and Shansee, the *Shantoo*, which enters Petchelee towards the sea, and the *Sira Muren*, described in our account of the Mandshoors. Their chief mountains are the Siolki chain and its continuation westwards till it joins the Kwanglung. There are many lakes in this country, but none remarkable for magnitude. The climate is piercing cold in many parts, fully as much so as in the country of the Khalkhas, and there is such a similarity in the productions, whether animate or inanimate, of both countries, that one description serves for both.—The territories of the Sharra Mongols are denominated from the several tribes which possess them; but since they have come under the absolute power of the celestial monarch, they have been divided into 49 shassaks or standards, under as many chiefs. The situation of these territories may be considered as it respects the four gates of the Great Wall, going from E. to W. N. of the most eastern gate in Petchelee 40° 19′ 30″ N. and 1° 28′ 30″ E. of Peking, are the countries of Karchin or the black tribe, Tumet, Ohan, Nayman, and Korchin.—*Karchin*, which begins at this gate, is composed of two districts or standards. The most remarkable place is Chahan Suberhan Hotun, or city of the white pyramid, 41° 33′ N. and 2° 45′ 20″ E. of Peking. It is by far the best district belonging to the Mongols, for as the present princes of it are originally Chinese, they have drawn several of their countrymen hither, who have built towns and improved the lands. Here are also some productive mines, some of excellent tin, with large forests of fine timber, by which the great ancestor of the present dynasty got immense wealth. Karchin is above 145 B. miles from N. to S. but much more from W. to E. Here are the summer-palaces of the Chinese emperors, near which they usually hunt, especially Zheholl, 41° 58′ N. lat. 120 miles N. of Peking; and here the British embassy was entertained in 1793. Our countrymen observed forests of aspen, elm, hazel, and walnut-trees, but on the mountains in the vicinity the pines were small and the oaks stunted.—*Korchin*, or the red tribe, is divided into ten standards, including the countries of Turbeda and the Jalayrs. The principal residence of this tribe is alongst the river Queyler, and their possessions extend to the Sira Muren in a S.E. direction, but they have neither springs for drink nor wood for fuel, which they supply by wells and dung of cattle. The principal point of Turbida is Haytahan Pira, 47° 15′ N. and 6° 30′ E. of Peking. The Jalayrs dwell by the Nonnee Oola, in 46° 30′ N. and 7° 45′ E. long. of Peking.—The *Naymans* compose but one standard, and their district begins from the S. side of the Sira Muren, in 43° 37′ N. and 5° E. of Peking.—*Ohan* is chiefly inhabited alongst the banks of the Narkoni Pira, where some rivulets, as the Shaka-Kol, fall into it 42° 15′ N. and 4° E. of Peking. Here in 41° 15′ N. are seen the ruins of a city called Kurban Suberhan Hotun, on a small streamlet which enters the Talin-Ho. Nayman and Ohan, though far less than Korchin, which is a large province extending four degrees from S. to N. and three from W. to E. are much better than it, being interspersed with shrubby hills, supplying wood for fuel, and abounding with game, especially quails.

These three countries, along with Turbeda, are sandy and very cold. Tumet composes two standards, and they dwell chiefly beyond the river Subarhan, where occur the ruins of Modun Hotun. It extends S. to the wall of China, E. to the palisade of Lyautong, and N. to Hara Paychang.

N. of the gate Kupi Kew (*kew* means a strait or defile) are the territories, formerly part of Korchen and Onhiot, but now converted into a forest, where the emperor hunts and has several pleasure houses. Kupi Kew is the gate called Kapki by the Russians, and is in 40° 42′ 15″ N. and 0° 39′ 4″ E. of Peking. N. of this gate are the districts of Onhiot, Kechikten, Parin, Sharot, Uchu-Muchin, Aru-Korchin, and Abu-hanar. Onhiot has two standards on the river Irikin, 42° 30′ N. and 2° E. of Peking.—*Parin* contains two standards, and its principal place is on the Hara Muren, which falls into the Sira Muren, 43° 36′ N. and 2° 14′ E. of Peking. This district is larger than Onhiot, but has but a poor soil. Kechiktin contains two standards, and its chief station is on a small stream running N.E. to the Sira Muren, 43° N. and 1° 10′ E. of do.—*Uchu Muchin* has two standards along the Hulgar Pira, 44° 45′ N. and 1° 10′ E. of do.—*Sharot* has also two standards, and is inhabited chiefly towards the confluence of the Laban Pira and Sira Muren, 43° 30′ N. 4° 20′ E. Aru-korchin has but one banner, which resides on the Arukondulon river, 45° 30′ N. 0° 28′ E.—*Abuhanar* has two standards, and is best inhabited about the Taal Noor, 43° 30′ N. 0° 28′ E. Within this second division, going almost due N. from Kupi Kew, some towns are found, and the ruins of some considerable cities, as Ilan Hotun, Poro Hotun, Kurtu Hotun, and Chau Nayman Sume Hotun,—all on the Shangtu river. The last of these seems to have been the city of Shangtu, called by the Chinese Kay-ping-foo, and built by Kublay Khan, who denominated it Shangtu, or the 'high court,' and was the summer residence of the Ywen dynasty, who in winter dwelt at Peking. It belongs to the country of Korchin, and is the Ciandoo of Marco Polo. Immediately to the N. of the gate Chang-kya-kew is a country which was conquered by the emperor Kanghee, and which is the property of the Chinese emperors. These lands, and all the rest alongst the great wall, are occupied by farmers belonging to his celestial majesty, the princes of the blood, and several Tartar lords. Here are Mongols of different countries arranged under three standards, and commanded by officers appointed by the emperor, and are therefore not reckoned among the 49 Mongol banners. Farther to the N. are the countries of the Mongol princes, of Whachit, Sonhiot, Sabahay, and Twinchooz.—*Whachit* has two standards, near the Cherin Pira, 44° 6′ N. 0° 45′ E.—*Sonhiot* has two standards, and the principal station is near a lake in 42° 29′ 7″ by observation, and 1° 28′ W. of Peking.—*Abahay* has two standards, which encamp about some lakes or meers, the southernmost of which is called Siretu Huchin, 44° N., and 1° 31′ W.—*Twinchooz* has but one banner, near the Orgun Alin, or mount Orgun, 41° 41′ N. and 4° 20′ W. N. of the gate Shahu-kew, in Shansee, are the emperor's lands, 40° 27′ and 4° 12′ W. of Peking. In this district, Khuku, or Khutuktoo Hotun, or city of the Lama's vicar amongst the Sharra Mongols, is the most remarkable. Here is a Lama temple where the same pantomime is carried on as at Lassa and Oorga. Here dwell the two chiefs of the Tummet tribe, appointed by the emperor. It is the capital of all the country of the Sharra Mongols, where the imperial governor and the Khutuklu lama reside.—Beyond this district lie those of the Mongol chiefs of *Kalka*, *Targar*, *Mauminggan*, *Urat*, and *Ortoos*. The two former have only one banner each, and the *Virat* or *Urat* has three standards, who range alongst the banks of the Kondulin river, in 40° 55′ N. and 6° 30′ W. of Peking. The Ortoos Mongols are hemmed in on all sides by the great wall and the sweep of the Whang-

ho. The chief point of this district, which extends 300 British miles N. and S., is in 39° 30′ N. and 7° 30′ W. of Peking. These Mongols are governed by several petty chiefs under six standards, and pride themselves on the largeness and number of their tents, as well as the multitudes of their flocks. Their country once made part of the empire of Tangut or Hya. Thus we have gone over the territories and standards of the Mongol tribes as briefly as possible. Although all these tribes live a roving life, yet they have their limits fixed by custom, beyond which they must not pass; and an act of this kind would be viewed as hostile. A boundary, called the *karou*, or 'limit,' has been fixed by imperial authority between the Khalkhas, or black Mongols, and the Sharra, or yellow Mongols, just described. It runs from S.W. to N.E.

As the *Sharra Mongols* belong to the same stock as the Khalkhas, the similarity of pastoral manners, customs, mode of life, religious opinions, and other things, is so great, that, in describing the one branch, we have, in fact, described the other. The only difference seems to be, that the latter being in the very vicinity of China, and enjoying the advantage of frequent intercourse with a nation more civilized than themselves, they are consequently somewhat more polished than their more rude and distant kindred. Since 1620, they have been possessed of a code of laws, subscribed by 44 princes and chiefs. In these the greater part of crimes is punished by fines, and actions of public utility are rewarded. He who refuses milk to a traveller is fined of a sheep. Trial by ordeal is admitted; likewise solemn oaths from a superior, attesting the innocence of an inferior, institutions coinciding with those of Europe in the middle ages. The southern Mongols are those of the race which always remained in the vicinity of China, and the Khalkhas such as were driven out of China and retired to the N. Thus we have gone over the two grand branches of the Mongolian family—the Khalkhas and Sharras. There is a third branch of Mongols, which inhabit the northern part of Tibet, and who are denominated, in Tibetian, *Hor*, and *Ghia Hor*, or the Ghia of Hor. The name Ghia, in Tibetian, signifies a great and very diffused people. The name of the Tibetian Mongols, in Mongolian, is *Siraigol* or *Charagol*. As we are very ignorant of the geography of Tibet, we cannot say much about the site of this Mongol branch; but probably it is about the source of the Whang-ho, in 35° N. lat. and 19° long. W. of Peking; where we find marked, in the 5th sheet of the map of Tibet, two lakes called Charing-kol and Oring-kol, and a small stream called Kara Pira, or the 'black river,' descending N. to the Oring-kol. In Tibet, likewise, the Mongols are usually denominated *Sogh-po*, or 'people of the prairies or meadows,' or, in other words, nomades or wanderers.

II. SOONGARIA, OR COUNTRY OF THE ELUTHS.

If little is known of the geography of Mongolia, still less is known of Soongaria, and that for two obvious reasons. This country has never been explored by Europeans, nor ever trodden by a European foot since the days of Ruysbroeck, in the middle of the 13th century; whereas, the road for the Russian embassies to China being through Mongolia, we have been enabled to say something of Mongolia, from the journals of these embassies. The second reason is, that, though little is known of Mongolia, yet we had some aids from the Chinese historians to clear our way, and give some idea of the country. But we have not the same aids respecting Soongaria; for if the Chinese know something of their neighbours, yet

they are profoundly ignorant of distant regions—regions not in immediate contact with their own. Hence Gibbon has justly characterized the Chinese annals by two remarkable properties, *domestic accuracy* and *foreign ignorance;* and, from the poverty of our stock, readers cannot expect that we can say either very much, or much to the purpose, on Soongaria. We have given them fair warning, and it is not our fault if they be disappointed. We can only say, in the general, that Soongaria is a basin or concave plateau, bounded on the N. by the Kirguisian mountains and the Little Altai, which separate it from Western Siberia; on the S. by the *Alak Tagh* or *Alak Oola*, which, in the Kirguisian dialect of the Turkish language, signifies 'the speckled mountain,' and which joins at its eastern extremity, the great Bogdo; on the E. by the Bogdo Alin, asserted by the Mongols and Eluths to be the highest summit of Central Asia; and on the W. by the northern continuation of the Beloor Tagh, which separates it from the country possessed by the great Kirguisian horde. Respecting its longitudinal extent, it is impossible to state it accurately for want of observations of longitude; and the same may be said of its breadth. We only know that it is a very lofty and extensive region, reaching perhaps from the 75th to the 100th deg. of E. long., or 25 deg.; or about 1200 British miles in the lat. of 45°, and from 43° N. to 52° in its greatest breadth, or 620 British miles; but the breadth and length are far from being regular; but the superficies of the whole may be about 700,000 British square miles.

Name.] The name *Soongaria*, applied to this region, is Mongolian, signifying 'the country to the left,' in opposition to Tibet, which they denominate Baronthala, or Barohn-djao, 'the country to the right' or to the S. Hence the name of Songaree, applied to that branch of the Eluths who possess this region, is taken from the country so called by the Mongols, or, in other words, the region does not derive its name from them, but they from it. Strahlenberg tells us, that the Kalmuks, properly called Eluths, call themselves *Avirat* and *Virat*, and *Derben Virat* or *Oirat*—that is, the four Avirat tribes, which are Torga-oth, Koshi-oth, Kay-oht, Dsongar, and Dor-both, which two last make but one tribe. Hence he also remarks, that the Mongols call the four above-mentioned tribes not only Avir-at, but also Viloth and Avil-oth; and in Tibetian they are called Oilodh; hence the modern name Eluths or Aluths. These Eluths are probably descendants of the Avars of Menander, the Aviri of Iornandes, the Ogorits of Simokatta, and are the same with the Avi-rat of De Herbelot. It is probable the Ogorits were the Oigoors so famous in Mongolian story. Abulghazi, in his romance called a history, classes the Kalmucks or Virats among the Tartar tribes, and the Oigoors amongst the Mongol tribes. Now, the Kalmucks are evidently a branch of the great Mongol nation, as well as the Oigoors, and we cannot help thinking these latter to be a branch of the same great family, and not at all of the Turkish race. But it is impossible to arrive at certainty respecting the origin and subdivision of the pastoral tribes of Central Asia, as they have neither literature nor history to aid us in the search

Climate.] There can be no doubt that this region, though in the same latitude of France, is much colder from its high elevation and the various ranges of lofty mountains which rise on the base of its plateau. The elevated region called Kankaragay by D'Anville, in which the Irtish has its source, must have a vigorous climate, as Mount Bogdo and the other ranges in its vicinity are covered with perennial snow. The Chahan Tala,

or white plain, to the W. of the Sanghin Talghin lake, or Windy sea, must be very elevated, and is, perhaps, one of the highest in the northern part of Central Asia; but we must demur to Malte Brun's opinion, that it is one of the most elevated in the old world, after what we now know of the prodigious elevation of some of the Tibetian uplands. We are rather of opinion that, after passing the Mooz Tagler, or northern boundary of Western Tibet, the uplands begin to decline in elevation; the plateau of the Lesser Bukharia being lower than that of Tibet, and higher than that of Soongaria, which, in its turn, overlooks the terrace which separates the Great Altai from the Lesser Altai; so that, from the Mooz Tagler and the Kwanglung, there is a succession of sloping plateaus northward, each lower than the other, till we reach the southern confines of Western Siberia. What we say on this point is, however, mere conjecture, as we have no facts on which to ground our opinion; and, if the plateau in the vicinity of the source of the Korghon, and bounding Soongaria on the N., be 7,000 feet of elevation, according to Ledebuhr, who explored the terrace of the little Altai to the very borders of this region, Soongaria must be a very lofty region. But Chinese jealousy prevents all discovery in Central Asia.

Mountains.] This region is traversed in various directions by many mountain ranges, of which the names only are known. The principal range, out of all question, is the great *Altai Alin*, or 'Golden mountain,' called by the Russians the Great Bogdo, and is as it were in the very centre of Asia at almost an equal distance from the Caspian, the Icy, the Chinese, and the Indian seas, and the grand culminating point whence all the rivers of Central Asia flow to different airths except the S. Its direction seems to be from N.W. to S.E., and has various names in different parts of its course, from the various nomadic tribes which at different periods roamed in its vicinity, as *Ek* or *Ak*, *Tak*, the White mountains from its snowy summits; *Kin*, or the Golden mountain, from the Chinese, which is nearly a translation of the Toorkish and Mongolian epithets, Altin and Altai. By the Jesuit missionaries, in their map of Soongaria, this range is called *Hangay Alin;* and by others Khanggai; and, in the journal of general Kokan, it is called *Han-hai;* and, by Sou-houng-kean-lou, *Hang-hai;* but none of these is the proper name of the range according to Remusat, who observes that Han-hai is one of the names which the moderns give to the Cobi, or sandy desert. But he further remarks, that Han-hai was anciently the Chinese name of a lake in Tartary (Soongaria), very probably one of those which abound in the mountains of Altai; and it was for that reason that, in the 7th century, when Taytsong, after the Chinese manner divided the Whey-he country into *foos* and *choos*, he gave the title of Han-hai to that region where dwelt the tribe properly called Whey-he, and near the mountain celebrated as the place where Temujin defeated the khan of the Naimans, and called Hang-hai, which seems to be no other than a Mongol corruption of the Chinese name, Han-hai, originally bestowed on the region of the Whey-he, but now given exclusively to the Altai. When we consider the Selingha and Orchon, especially the latter, have full 400 B. miles, in direct distance from their sources, in the Altai, to run, before the confluent stream enters Siberia at Kiakhta, and that Kiakhta itself is 2,560 feet above the level of the sea, we may form some idea of the elevation of the Altai. From this range a great many branches are sent off in various directions under as various names. The upper course of the Irtish is flanked on both sides, before it arrives at the Saissan lake, by the Bogdo on the right, and the Chamar Daban on the left or S., which runs

E. and joins the Ui Daban. To the S. of the Chamar Daban is a high level, watered by the Bortal river, which runs E. and is lost in a lake Another range separates this upland from that watered by the Ili, which, in its turn, is separated from the Lesser Bukharia by the Alak chain. Another range, called the *Malhan Alin*, separates the basin of the lake Kirkir from that of the Upsa lake.

Lakes.] In respect of the number of lakes, the plateau of Soongaria bears a strong resemblance to that of Tibet. This region seems to be composed of a great number of concavities of greater or less dimensions, either surrounded by mountain-groups or bordered by mountain-chains, in which most of the rivers of this region are lost. Of these—if we can trust the Jesuit's map, made solely from itineraries or native report—the basin of the lake of *Kirkir*, in the centre of Soongaria, is the largest. This basin is watered by a large stream descending S.W. from the Malhan Alin, and then running N.W. to that lake into which it enters, after a semicircular course of 300 B. miles. So semicircular is its course as to represent a bow, of which the space between the lake and the source of the river represents the string.—To the S.W. of this is the *Ekearal* lake, which is fed by two streams descending N. from the Hopto, and communicating with that of Kirkir by means of a large stream which it sends N.E. to it.—N.W. of the Kirkir lake is that of *Upsa*, into which the Teiz Pira descends from the N.E.—In the eastern extremity of Soongaria, and in the very heart of the Altai, is the large lake of *Sanghin Talghin*, surrounded with lofty mountains; and a little to the S.E. is *Uljeyai Chahan Omo*, the source of the Shilotoo, the chief branch of the Selingha.—On the S. side of Soongaria are the lakes of *Kisalbas* and the *Chahan Omo*. It is probable that the Chahan lake at the source of the Shilotoo, N.W. of Kara-korom was the *Cianga* lake of Marco Polo, where the grand khan had a summer-palace. It abounded with swans, pheasants, cranes, partridges, and quails; but as it was too cold in winter, it could only be visited in summer.—In the western extremity of Soongaria is the *Balkhash*, or *Palkasi Noor*, a large basin of water, said to be 15 days' journey in circumference. It is more than two and a half degrees in length, by a degree in breadth. But as a proof of modern ignorance, no two maps agree in the longitude of this inland fluid expanse: some placing its eastern extremity, in 77° and others in 72° E. long. Rubruquis and Plano Carpine passed by this lake in their way to Karakorom, and say that so violent gusts of wind blow from the surrounding country as to blow travellers into the lake. The mountains to the W. of this lake form the western limit of Soongaria.—E. of this lake is a range of mountains which separate it from a series of lakes running eastward—the *Alaktookol* and the *Kinre*, into the latter of which descends the river Imil from the E., through a gorge of the mountains which shut up this concavity on the E.—Another large lake is that of *Soissan*, called also *Honhotoo Noor*, said to be 90 miles long from E. to W., and 40 from N. to S., in 47° 30′ N. lat. and 84° E. long. at its eastern extremity.—N.E. of this lake is that of *Altin Kol or Noor*, or 'the Golden lake,' called by the Russians *Teletskoy Osero*, or 'the Lake of the Telessi,' a Kalmuk tribe which inhabits the vicinity. It lies in very elevated ground, and is surrounded with mountains; its bottom is rocky, the sides steep, and it is itself very deep. The northern part is sometimes so hard frozen as to be passable on foot, but the S. part never freezes. The water in this lake, as well as that in the rivers which run through the adjacent parts—contrary to what happens to other lakes and rivers—rises only in the middle of summer,

when the great heats have melted the snows on the mountains which remained undesolved in spring. The N. end of this lake is fixed in 52°, and E. long. 83° 30′, according to some maps, for they are by no means agreed. By some this lake is placed out of Soongaria and within the Russian limits. We adhere to the Petersburg academy's map, which places it in Soongaria. Strahlenberg identifies, in his map, this lake with that of Kirkir above mentioned, and the Balkash lake with the Tshui lake of his map.

Rivers.] Compared with other regions of Central Asia, Soongaria seems to be well-supplied with rivers, as, independent of those which are absorbed in lakes, the three largest rivers of Western Siberia originate in this region, and water no small portion of surface: namely, the *Irtish*, the *Oby*, and the *Jenisea*. It is here as with the mountains and lakes, we know little more of the Soongarian streams than their names; for, since the days of Carpini and Ruysbroeck, no European has traversed the country, and Russian knowledge is still confined to the N. of the Altai. The *Irtish*, near its source, is composed of two small streams, called the *Char Irtish* and *Chor Irtish*, or 'the Black' and the 'Red Irtish,' which originate at the foot of the Great Bogdo, in 93° E. long. of Greenwich, and 46° N. lat. These two small lakes are said to be 30 miles asunder. After a long descent of more than 400 B. miles, alongst a very elevated plateau, in a W.N.W. direction, it enters the Saissang lake, and issuing thence it turns northward, and enters Siberia opposite the fort of Bukhtarma, the most advanced Russian station towards the S. Its course through Soongaria is upwards of 550 B. miles in a direct line.—To the N.E. of the Upper Irtish is the source of the *Oby*, in 48° N. lat. and 96° E. long., at the foot of the Great Bogdo, where it is called the *Shabekan*. Under that name, it runs N.W. to the Altin Noor, or 'Golden lake;' issuing thence, under the name of the *By*, it enters Siberia in 52° N. lat. and 87° 10′ according to Pinkerton, and 88° 44′ according to the map of the Russian academy, after having also performed a course of 550 miles through Soongaria. It is not till after its junction with the *Khatoonya* that it is called the *Oby*. The *Jenisea* is composed of two small streams, the *Bei Kem* and the *Oola Kem*, the latter of which is separated from the upper course and source of the Shabekan by a range of mountains on the S. Both these branches originate in the N.E. angle of Soongaria, from the western base of the Great Bogdo, which separates them from the sources of the Selingha. After running W. for a small space, the two streams unite under the name of the *Kem*, in 51° 30′ N. and 95° E. long. Its true name is the *Kem*, and not the *Jenisea* or *Enisea*, which is the Tongoosian appellation. It is called, throughout the whole of its course, the Kem, by Mongols, Turks, and Chinese. As its whole course through Soongaria is in a mountainous and rocky tract, it is not navigable; and on account of its cataracts and stony bottom, it produces no fish. There are not less than 12 cataracts between its confluence with the *Kemtschyug*, and its junction with the *Abakan*.—The next and last large river of consequence is entirely a Soongarian stream, and is called the *Ili* or *Eli*. This river is composed of two main branches, the *Tekis* and the *Ili*, both which rise in the Alak Tagh, in 83° E. long., according to the Jesuits' map, and in 44° N. lat., near the pass of Khonghis, and is, on that account, called also the *Khonghis* river. This stream is made first to run 150 miles N.W., and then 150 miles N., till it falls into the Balkhash lake.—The Tekis rises considerably to the W. of the Ili, and having run 70 miles N.E. enters the latter by several mouths. The mouth of the Ili is fixed by that map in 48° N.

Cities, &c.] Having finished our geographical remarks on Soongaria, we must confess that we can give no other account of its soil and produce than that it is a pastoral country. As to cities, there are none that are marked on the map, but *Munas Hotun*, and of it we know nothing. We, indeed, read of several cities having once existed in the days of the Oigoors and Turks, as *Imil*, *Almaloo*, *Almalig*, and *Bishbalig*, all Turkish names: these cities lay in the southern part of Soongaria, on the confines of the Little Bukharia, but they are said to be now in ruins.

Inhabitants.] Who were the original inhabitants of this region, none can tell; but it is plain from history that it has been inhabited by different races of wandering hordes at different periods, and perhaps at the same time. Abulghazi Khan makes it the original residence of *Turk*, the son of Japhet, the common ancestor of all the Scythian and Tartar tribes of Asia, and of that Mythic hero, Oguz Khan. According to the Chinese accounts, the *Oigoors* seem to have been the earliest known inhabitants, for they possessed at a very early period all the tract between the lake of Lop and the river Ili. We know, also, that the Oigoors were settled westward as far as the Irtish, but whether these were a Toorkish or Mongol race, or one different from both, is not at present determined. The *Kirgees* also dwelt on the banks of the Jenisea before the time of Jenghis Khagan, and the *Virats* or *Eluths*, the ancestors of the present race, inhabited the region of the Sekir Muran, or 'Eight rivers,' that fall into the Jenisea from the E.; although they no longer dwell on the Jenisea, but to the W. of the Beloor and the Irtish. The migrations of the pastoral nations of Asia have been so frequent, according as caprice dictated, ambition impelled, or necessity compelled, that it is not possible to unravel the web of Tartar history and geography, so that we must be content to know who are the present inhabitants of Soongaria and their present political state. The first time we hear of the *Eluths*, as a distinct tribe of the great Mongolian family, is about the commencement of the reign of Yong-loo, successor of Hong-voo, the founder of the Ming dynasty, when Ma-ha-mou, khan of the Wa-la, or Oilots, and A-lou-tai, prince of the Mongols, received each a Chinese title from the emperor Yongloo. That of the former was *Chun-ning-Wang*,—'the obedient and peaceful king,'—that of the latter *Honing-wang*,—'the pacific and tranquil king'—so that at that period the Mongols and Eluths were viewed as distinct hordes, whose princes condescended to receive the title of *wangs*, which indicates the fallen fortunes of the successors of Jenghis Khan, and that the khan of the Eluth branch was now independent of the Mongol khans of Kara-korom. We hear no more of them till the middle of the 16th century, when all the various branches of the Eluths were united under one khan who reigned in Soongaria, and were continually at war with the Usbecs, called by them *Hassak Puruks*, who in their turn gave them the nick-name of *Kalmuks*. Ablay, a brother of the Eluth khan who then reigned, raised a rebellion against him, but was defeated and obliged to retire towards Siberia. Two places on the frontier of Soongaria, towards Siberia, and marked on the maps of Strahlenberg and D'Anville, under the names of Ablaket and Sempalat, or the 'Seven palaces,' were perhaps the abode of this Ablay Khan, at least a number of ruins have been discovered at these places and the vicinity; and at that time the power of the Eluths extended as far N. as 55° N. lat. The son-in-law of this khan, named Kaldan Tsereng, and Kaldan Pojuku, was a powerful and ambitious prince, and disputed the khanship with his father-in-law, the *Kontaysha*, or grand prince of the

Eluths, whom he defeated in a battle near the great lake *Kizalpoo*, (probably the Balkhash Noor is the lake here meant), took prisoner, and murdered, in order to secure his authority. He then conquered the whole of the Lesser Bukharia; and in 1683, he subdued Tibet, and deprived the secular prince of all his power. That prince was called *Tsanpa Han*, and Kaldan transferred his power to the Dalai lama. He next attacked the Khalkhas, and but for the timely interference of the emperor, Khaunghee, would have utterly ruined them. This tide of success alarmed Khaunghee, who plainly saw that if the Khalkhas were ruined, his Mongol subjects would join Kaldan, and thus endanger the throne of China. With the view of checking Kaldan's progress, he ordered a large army into Mongolia to assist the Khalkhas, who attacked Kaldan, who, although he had no artillery and but few troops, resolutely sustained the shock, and at the end of the battle retired to his camp without being pursued by the enemy. As this was an indecisive action, Kaldan again advanced, in 1694, and ravaged all the lands of the Khalkhas, and marching thence S. to the territories of the Sharra Mongols, endeavoured, by a letter to the khan of Korchin, the chief of the Mongol princes, to stir up him and the other khans against Khaunghee, and to make common cause with him against the Mandshoors. This bold step roused Khaunghee to instant exertion; and in 1696, three armies, one of them headed by himself, invaded Tartary on all sides. One of these obtained a complete victory over Kaldan, near the source of the Toola, whilst that under Khaunghee struck every place with terror. This defeat proved the utter ruin of Kaldan, and the destruction of the Eluths was so great that very few remained in the territories of the Khalkhas, whilst the unfortunate Kaldan escaped almost alone into Soongaria exposed to the reproaches of his vassal hordes. He now endeavoured to negotiate a peace with Khaunghee, and sent Tsebden Baldjir, his son, with a small retinue of Eluth chiefs, to the Dalai lama of Tibet, to beg his interposition with Khaunghee. But Ebeidoola, the Mohammedan chief of Hami, seized him and the other Eluth chiefs, and sent them prisoners to Khaunghee, who cut off their heads, and confirmed the traitor Ebeidoola in his post. Kaldan, unable to survive such calamities, poisoned himself, and was succeeded by his nephew, Tsevang Raptan, who proved himself equally ambitious as his uncle, and almost as formidable. He secured Bukharia from falling into the hands of Khaunghee, and punished the Mohammedan rebels of Yarkund. In 1703, the large horde of the Torgauts or Black Kalmuks, under Ayucka Khan, cousin of Tsevang Raptan, abandoned Soongaria, and crossing the Juick or Ooral, placed themselves under the protection of Russia. The ostensible motive of Ayucka Khan for taking this step, and thus weakening the power of the kontaysha, was the fear of his life. The ordinary summer-encampment of the kontaysha called Hancas or Oorga, was on the banks of the Ili, to watch the motions of the Toorgauts under Ayucka, and the Kirghees and Usbecs. In winter he resided at Yarkund in Little Bukharia. In 1716, he invaded Tibet, as his uncle had done before, took Lassa, ravaged the country, plundered the temples, not even sparing Pootala itself, the residence of the pretended Immortal, carried off all the yellow-robed lamas he could find, put them in sacks, and transported them on the backs of camels, as prisoners to Soongaria. This produced a fresh war with China, which was finished in 1720, in consequence of a complete defeat from the army of Khaunghee, commanded by his third son, who subsequently succeeded his father in 1723, under the title of Yong-ching. In consequence of this defeat the

Eluths lost all Tibet and the provinces of Khamil and Toorfaun. Though repeatedly unsuccessful in their wars with China, yet the restless Eluths involved themselves in another with China. By the aid and influence of Kienlong, Amursanan, who had fled to Peking from the resentment of the reigning khan, and remained for some time a pensioner on the bounty of Kienlong, was on the death of Debatchi, advanced to the dignity of kontaysha. But scarcely had he obtained his new dignity, when, forgetful of prior obligations, he attacked the Chinese garrisons in the districts of Hami and Toorfaun, which produced a long, and, for a considerable time, an indecisive and harassing warfare; but which finally ended, after 13 years' continuance, by the complete destruction of the independence and power of the Eluths, in 1759, and their almost utter extirpation. This was accomplished chiefly through the skill and sagacity of Foote, the general of Kienlong. Amursanan, with such Eluths as survived this dreadful calamity, fled to Siberia, where he died in a short time. The Chinese, not satisfied with his death, desired the Russian governor to deliver up his dead body as that of a traitor and rebel, which was refused, but Chinese commissioners appointed for that purpose were gratified with a sight of his corpse. Thus ended the formidable power of the Eluths, which for a time seemed to shake the stability of the reigning dynasty on the throne of China. In consequence of this event, all the extensive tract which once owned their nomadic sway, reaching from the Bogdo to the Beloor, and from the Kwanglung to the Siberian frontier, fell under the domination of China, and the spot where once the kontaysha fixed his camp is now the residence of a Chinese commandant. In 1770 and 1771, the Torgaut Eluths, who had formerly ranged the plains of the Volga and Jaick, returned by two successive emigrations to their ancient possessions in Soongaria. The first emigration consisted of 30,000 families, and the second of 50,000 families: 80,000 families in the whole, or nigh 500,000 persons. The plan was so well laid, and so ably executed, that in spite of Russian vigilance and Russian pursuit,—in spite of opposition from their hereditary enemies of the great Kirgissian horde,—they reached the Balkhash Noor, and were received by the Chinese guards posted on the Tekis and Ili, and pasture-lands on the banks of these two streams were assigned them by orders of Kienlong, but the chiefs with their families were all sent, under a strong guard, to Peking, there to remain as hostages to ensure the submission and peaceable conduct of the Torgauts.[11] The present possessors, therefore, of Soongaria, under the sovereignty of China, are the *Torgauts*, the most numerous body,—the remains of the *Soongarees*, supposed not to exceed 30,000 families,—and the *Derbets*, whose numbers are unknown. To these must be added, the *Soyetes* or *Oriangkhai*, a Samoied race according to Klaproth, inhabiting the high lands of the upper Jenisea, or more correctly the Kem. This tribe is divided into 11 banners, and contains 10,000 families. In this enumeration, the *Tèlessi*, an Eluth tribe about the Teletskoi Osero, must also be included.

[11] To commemorate this remarkable event,—the voluntary emigration of a whole nation, with all their numberless cattle of various descriptions,—a marble monument with an inscription, detailing the fact, was erected at Peking, by orders of Keiulong.

III. LESSER BUKHARIA, OR EASTERN TOORKISTAUN.

Name.] The former of the above names is not made use of because the country so called is actually less in superficial extent than Great Bukharia—for, in reality, it is much larger—but because it is inferior to it in respect of the number of its cities, the fertility of its soil, the amount of its population, and some other circumstances. These adjuncts of *Great* and *Little* seem to have originated with the Usbecks, who employed them to distinguish such part of the Bukharian territories as is not possessed by themselves, from that which is. Yet Abulghazi, himself an Usbeck khan, never mentions Little Bukharia; but speaks of Khashghar, Yarkund, and other districts belonging to it, without using any general denomination for the whole tract. Neither is the appellation of Little Bukharia used by sultan Baber in his memoirs; he only speaks of Khashghar and Khita. When conquered by Zingis Khagan, it was called *Karakitay*, or the country of the Western Lyau; but it was afterwards called *Jagatay*, as being assigned to Jagatai, the son of Zingis, together with the country to the W. of the Beloor. The Persian writers usually called it the kingdom of Khashghar, being that part of it which was nearest to them, and best known by them. In the life of Timoor Bek, it is never called Little Bukharia, but is considered as part of Mogulestan and the country of the Getes. By Edrisi it seems to have been described under the name of the country of the Taghaz Gaz Toorks, bounded on the N. by Kaymak, which seemingly corresponded to the western part of the modern Soongaria, and his Kaymaks seem to be the modern Kalmucks. As it has been inhabited by Toorkish tribes from the remotest antiquity, Edrisi was correct in classing it as a Toorkish region; and his *Taghaz Ghaz* seems to be the *Taugas* of Simocatta—a Byzantine writer of the 6th century—a Toorkish tribe which conquered Northern China, and gave birth to the Suy dynasty, which took Nanking in 589, A.D., conquered Southern China, and reunited both under one head in the time of the emperor Mauritius. *Eastern Toorkistaun* is, therefore, or ought to be, the true name of this extensive region; but the appellation of *Little*, or *The Lesser Bukharia*, has obtained such firm footing amongst modern writers and geographers, that we are here—as in former instances—compelled to conform to modern usage, in assigning to this region the name of Little Bukharia.

Boundaries.] Little Bukharia is bounded on the N. by Soongaria, already described; on the E. by the Mongolian desert; on the S. by Western Tibet, the unknown parts of Great Tibet, and the N.W. extremity of China; and on the W. by the Beloor or Thsoungling range. But while we have thus stated its general boundaries, candour obliges us to say, that we cannot fix its southern boundaries with all that precision the subject requires. Being ignorant of the northern frontier of Eastern Tibet, we cannot, consequently, determine the southern frontier of Little Bukharia in this part.

Superficial Extent.] In the *Memoires sur les Chinoises*, Little Bukharia is said to extend 16 degrees of longitude in the parallel of 40° N. lat., and 5½ degrees in breadth from S. to N., or 800 British miles, by 380 of mean breadth; thus making a surface of 300,000 British square miles. But, in this estimate, the eastern parts of this region are omitted, namely, the large districts of Toorfaun and Khamil, as these have been subject to China since 1720. Including these, Little Bukharia may be said to have more than 25 degrees of longitude in the parallel of 43° N. lat.,

and above 20 degrees in the parallel of 40° N. lat., or more than 1,040 British miles; and we may venture to extend its breadth in the eastern part as far S. as 35° N. lat., to the northern base of the Kwanglung, the frontier of Tibet. Its general breadth in the N.W. part is from 38° to 44° N., and in the S.E. part from 35° or 36° to 44° N. lat.; but this, it must be remembered, includes the Great Desert, or Shamo, of which Marco Polo has given such a fearful picture. The whole may include a surface of 500,000 British square miles.

Historical Notice.] The history of this region in early times may be said to be unknown, as the ancients knew little or nothing either of the country or its inhabitants, but classed it as a Scythian region to the W. of Serica. In times more modern, all we know is, that it was successively subjected to such of the nomadic hordes as were, for their short and uncertain hour, lords of the military ascendant, and the Eluth Kalmucks were its last masters. When the domination of the Eluth khan, Taidshas, was annihilated by the superior power of China in 1759, Bukharia fell into the hands of the victors.

Physical Aspect.] On this we can say but little; but, if we may judge from the course of the rivers, the country seems to decline towards the N.E., and the celebrated lake of Lop is the lowest level. N. of this lake, the country rises towards the mountains of Alak; and to the E. it rises again towards Hami, which in its turn is separated from the Desert by a range of mountains.

Mountains.] Little Bukharia, including the Desert, is every where surrounded by lofty mountain-ranges,—as the *Alak Tagh*, the *Mooz Tagh*, the *Beloor*, and the range that connects the Bogdo with the Kwanglung. All these enclose a very lofty plateau, next, perhaps, to that of Tibet in elevation.—The northern chain of Alak has various appellations. It is called, in the Kirghisian language, *Alak Oola*, or 'the Speckled mountains;' the *Musart* mountains by Pallas; and by the Chinese, *Teen-Shan*, or 'the Celestial mountains,' or 'Mountains of heaven,' from their vast elevation; and also *Ta-seue-shan*, or 'Great snowy mountains;' while by Remusat it is called the chain of *Hami*, or *Khamoul*, because it extends from the W. of Khashghar eastward to the N. of Kamoul. The Teen-Shan, or Alak mountains, are spoken of by the Chinese geographers in terms of astonishment, for their height, and their icy, luminous glory; as being covered with eternal snow and glaciers; piercing the clouds; reaching to heaven; presenting an appearance of long chains, or spiral peaks, with cragged breaks, deep gulfs, valleys, and ravines, which prove these mountains to be the dragon-ancestors of all other mountains in the world. This chain is said to be volcanic; and the mountains of Beshbaligh, in 46° N. lat. and 78° 36′ E. long., and those of Toorfaun, in 43° 30′ N. and 89° 36′, are represented as constantly emitting flame and smoke. The Alak is connected with the Great Bogdo, and runs S. to the Desert, on the E. of Hami, and on the W. it is connected with the Kynder Tau and the Thsoungling. This western range is also called *Thsoung-Shan*, or 'Onion mountains,' as some suppose, from the abundance of plants of the *allium* species which are found upon it. But Remusat remarks, that the Chinese term, *thsoung*, is ambiguous, and signifies both an onion and the pale blue colour, and therefore chooses to call them the Blue mountains, as the more natural interpretation of the name. We have already described them in our account of Western Toorkistaun.—On the S. are the *Mooz Tagler*, or 'Icy mountains,' called

in Chinese *Ping-Shan*, which is just a translation of Mooz Tagler; and also sometimes named *Naushan*, or 'the Southern mountains;' and in Chinese poetry the *Kwang-lung-Shan*. In later times, the Thsoungling, or 'Blue mountains,' and the Nau-Shan, or 'Southern mountains,' have been taken the one for the other; and, in fact, both of these names have been applied to the Mooz Tagler. As these mountains are of the very first order in respect of massiness and elevation, the term *Thsoung-ling-Shan*, 'Cerulean,' or 'Azure blue mountains,' is a very appropriate appellation. This colour, which partakes of the azure of the high regions of the atmosphere, and of that golden light which lies upon distant objects, is a sure warning to the spectator, that, before these summits can be reached, many a valley must be passed. Such as are not acquainted with mountains of the first order can have no idea of that golden and transparent hue which tinges the highest summits of the earth. It is often by this alone that the eye is informed of their prodigious elevation; for, deceived in its estimation of heights and distances, it would confound them with every thing, which, either by its form or situation, is capable of imitating their magnificence, did not this species of celestial light announce that their summits inhabit a region of perpetual serenity, and justify their title of *Teen Shan*, or 'the Mountains of heaven.' The Mooz Tagler, or Kwanglung, stretches all the way E. from where it joins the Beloor, in 73° E. long. to the N.W. frontier of Sechwin in China, in 100° E. long. and 35° N. lat., a space of 27 degrees, or more than 1,500 British miles of length: being in its whole length the northern frontier of Tibet, as the Himmaleh is the southern. As it stands on a much higher base than the latter, its absolute elevation may be presumed to equal at least, if not surpass, that of the Himmaleh.

Rivers.] The chief rivers of this region have their rise in the southern range, the Mooz Tagler, and the Beloor, as the river of *Khashghar* which originates in the Beloor, in 41° 31′ N. lat. and 71° E. long. by Waddington's map, at a place called Koksoo, where it is separated by an intervening ridge from the source of the Seehoon or Iaxartes. It runs first due E. through the mountains, and then generally E. by S. to Khashghar, a distance of 330 British miles by the caravan route, and thence runs E. till it joins the river of *Yarchund*. This latter stream rises (says Goes) 20 days' journey S.W. of Yarchund, in the mountain Con-Sangui-Kasch, or 'the stony mountain' (the same with the Karangoui Tagh of Sherefeddin, and with the Mooz Tagler). This river is called *Meleschа* by Strahlenberg, and *Ta-li-mou* by the Chinese, and runs N.E. and falls into the lake of Lop or Lopoo, 600 miles to the E.N.E. of Yarchund. The third river is that called the river of *Khotan*, which rises to the S.W. of that city, in the same chain as the Ta-li-mou, and consists of three branches, named the Yorong-kash, or 'white jasper river;' Kara-kasch, or 'black jasper river;' and Yeschil-kasch, or 'green jasper river;'—all which meet below Khotan, and run N.E.; but whether it joins the Ta-li-mou, or is lost in the desert, is uncertain. Of the other rivers of this region we can say nothing farther, than that they are either lost in lakes, or absorbed in the sands of the desert.

Lakes.] This elevated plateau abounds in lakes towards its eastern extremity; and it is a remarkable feature of its physical geography, that none of the rivers which originate in it run out of it, but are all absorbed in lakes, or lost in the desert.—The *Lopoo* lake is the common receptacle of all the large rivers that water this region. We know

nothing more of it, than that it is a large salt lake, and seems to be the same with the sea of Sin, mentioned by Edrisi in his imperfect and romantic geography of the country of the Turks.—E. of this, in the province of Hami, is the lake called *Parkol* or *Barkol*, seemingly surrounded with mountains, and which lies to the N.W. of Hami. Of the other lakes, their names may be seen in the Jesuits' maps of Bukharia and Tibet.

Deserts.] More than one-half of this region is composed of sandy and sterile deserts, towards the S. and S.E. It is here that the Great Kobi or Shamo commences, to the E. of the province of Khashghar, and runs E. and N.E. as far as the mountains of Siolki on the confines of Mandshooria.

Climate.] Like the other plateaus or uplands of Central Asia, the temperature is extremely cold, especially towards the mountains. So great is the cold in the province of Toorfaun, that the ambassadors of Sharokh Mirza, in their journey from Samarcand to Peking, found the water covered with ice two inches thick, falls of snow and rain were frequent, and all this at the time of the summer-solstice, which rendered their journey extremely fatiguing and unpleasant. The tract to the N.W. of this, on the Ili, where the Chinese commandant resides, is called in Canton *Colo*, or 'the cold country;' and thither the bankrupt Hong merchants are banished as a punishment for insolvency. The Chinese armies lately sent to crush the revolt of the Mohammedans of Khashghar suffered severely from the rigour of the climate, and were arrested in their progress at Hami, through the inclemency of the season The temperature seems to be mildest, as might be expected, in the centre of the country.

Soil and Produce.] Of these little can be said; and what has been said on this head is inconsistent and contradictory. The truth seems to be, that the soil and produce vary exceedingly in different places from the difference of temperature and supply of water, and can be best described in our account of its different provinces.

Divisions.] Chinese Toorkistaun may be conveniently divided into the four large districts of *Khashghar*, *Aksoo*, *Toorfaun*, and *Khamil* or *Hami*. All these provinces are superintended by a Chinese governor, who resides at Eelah, and holds rule over the following places of importance: Eelah, Khashghar, Yarkund, Khotan, Karakash, Gumma, Toorfaun, Elchi, Karria, Kargalik, Yenghi-Hissar, and Wooshik. The following are said to be the eight great Mohammedan cities of this region: *Khashghar*, *Yarkund*, *Harashar*, *Koochay* or *Outchi*, *Aksoo*, *Khotan*, and *Yinkeshar* or *Yingkishshaur;* but the lack of geographical information is so great, that even neither Joles Klaproth, with all his boasted store of Chinese geography, nor his friend Remusat, have been able to supply the void. Klaproth has been forced to eke out his description from the Jehan Nooma of Hajy Khalifa and the Takwimal-Beladan of Abulfeda.

1*st. Province of Khashghar.*] This is the most western division of Chinese Toorkistaun, and is now comprehended in the district of Yarkund, which also includes that of Khotan. Khashghar, the capital, was for many ages the seat of an independent prince, in later times the residence of the Karakitayan khans, and subsequently that of Jagatay khan and his successors, till subdued in 1683 by the Eluths. It is situated, according to the Jesuits' maps of 1760, in 39° 25′ N. lat. and 76° 0′ 45″ E. of Greenwich, on the banks of a river which derives its name from the city, and

was a place of great celebrity both as a royal city and a commercial entrêpot. It was, however, completely destroyed by the Mirza Abubeker; but was again rebuilt by his orders. Before the late rebellion of 1826 and 1827, this city was supposed to equal Amritsir, the capital of Runjet Singh, in size, containing 10,000 houses, and being crowded with population and thronged with strangers. Khasghar is called *Ordukend*, or 'the City of the horde,' by Abulfeda, and Hasikar in the Jesuits' map; and *Kih-shĭ-ko-urk* by the Chinese.

Yarkund.] This is the largest and most commercial city in all Chinese Toorkistaun. It is situated in 38° 19′ N. lat. and 78° 27′ 45″ E. long. This city also was destroyed by Mirza Abubeker, but again rebuilt and restored to prosperity and population by the hand which destroyed it. As he found the air and water of the place agreed with his constitution, he made it the place of his residence, had water conducted into the town, adorned it with splendid buildings, surrounded it with walls thirty cubits high, and planted 1200 gardens in its vicinity. Yarkund was in 1812 defended by a stone and mud wall with five gates, and had ten colleges supported by donations in land. The city is much larger than Khashghar; the houses are of stone cemented with mud, and are filled with balconies. It is under a Mussulman chief, who regulates its civic economy, and is called the *Hakim*, and two Chinese collectors called *Ambans*,—all under the command of the chief who resides at Khashghar. There are above 40,000 individuals who pay poll-tax in Yarkund and its environs. The inhabitants of these two cities are chiefly mechanics, merchants, and moollahs. There are no servants in these cities, but slaves imported from Badakshaun and Kaufireestaun. Many of the inhabitants are afflicted with the large glandular swelling in the throat called goitre. Yarkund is 360 li or 124 British miles S.E. of Khashghar.

Khotan, &c.] For three days' journey to the S.E. of Yarkund, the country is filled with rivers, trees, and gardens. Six days' journey farther on is the celebrated city of *Khotan*, but, except the stations, there is no habitation on the whole road. Khotan [12] is the capital of a populous and fertile district, 1000 li, or nigh 350 B. miles in circumference, according to a Chinese description of the western countries, published at Peking in 1777. It is bounded on the W. by very high mountains and chains, which it is impossible to cross, and to the E. it has nothing but sandy deserts and marshy grounds, which extend nearly as far as the Sing-soo-hee lake (near the source of the Whang-Ho). The country is bad, and governed by two superior officers, dependent on the commandant of Yarkund. It contains the following six cities, *Khotian*, *Yooroong-kash*, *Karakash*, *Tsura*, *Karia*, and *Takhoobooee*. Each of these cities has its hakim, and form what is called the council of Khotan.—To the S. of Khotan, 20 days' journey, is Western Tibet, and 700 li, or 240 B. miles N.W., is Yarkund. The country is flat, and consists of well-watered fields. It is in fact an oasis in the Buckharian desert. According to Marco Polo, who visited this place, the district is eight days' journey in extent, and produces cotton, flax, hemp, vines, and other useful plants, besides melons and fruits of various kinds. The men are employed in agriculture, and the women are engaged in domestic economy and commerce. They also raise silk-worms, the mountain-silk is most esteemed. Khotan is called *Cotan* by Marco

[12] The site of Kotan has been variously placed in modern maps. D'Anville has placed it 33° W. of Peking, or upwards of 83° E. long. and 37° N. lat. Thompson in nearly 76° E. long., and Dr Morrison, in his view of China, in 35° 30′ N. and 31° W.

Polo, and *Hotom* by the Jesuits; and the river on which it stands *Hotom-nisolon-Khateen* by Bentink, *Chotun* by Strahlenberg, and *Kolon* and *Khoton* by the Orientals. Hence some have been led to believe that it is the same with the Mandshoorian word *khotun* or *hotun* signifying a city, and that it was built by the Karakitayans, a Mandshoor tribe, who ruled this region in the 12th century. But this is altogether a mistake, as Khotan existed many centuries before the Karakitayans were even heard of, and the name is no other than a corruption of the Shanscrit name *Koustanna*, 'the Breast of the Earth.' It was founded by a colony of Hindoos long before the birth of Christ. It is called by the Chinese *Kiusatanna* and *Juthean*, which are mere corruptions of the Shanscrit name. At present it is named *Khoteyan Ilitchi* by the Chinese. According to Morrison's view of China, Khotan contained a population of 13,642 families, and 44,650 individuals. Khotan was not only a Hindoo colony, but also a colony of Hindoo Boodhists, as Boodhism was established there before the birth of Christ, and continued to be the prevailing system till the Mohammedan Turks conquered all the cities of Little Bukharia. It was a flourishing wealthy city in the second century of the Christian era, when it contained a population of 32,000 families, 83,000 persons, and more than 50,000 soldiers. It was a great resort of the Boodhists from all quarters, who brought thither their sacred books and the traditions of their faith. All the environs were covered with Boodhist temples and monasteries, in one of which 3000 rahans were lodged, who lived in common, and the city was adorned with a prodigious number of statues of Boodha and his priests.—To the W. of the city, in the fourth century, as we are told by the Chinese writers, under the Tang dynasty, was a great monastery called the New Temple, which was 80 years in building, and three kings successively overlooked the work. It was 250 feet in height, and adorned with paintings and inscriptions engraved in metal, covered over with gold and silver, and enriched with all sorts of precious ornaments. It was terminated by a tower, and a saloon was constructed for Boodha, the beams of which were of the most precious wood. The columns, the gates, the windows, and screens were covered over with plates of gold. Close by the side of this monastery were small cells, for the Boodhist monks, which also were beautiful and very richly ornamented. But the system of Mohammed has long supplanted the Boodhist creed of Khotan, and the temples, monasteries, and palaces, are now in ruins, if even these remain. But Khotan has always been celebrated for its jasper or *yu*, as the Chinese call it; of this, three kinds are brought down by as many rivers, during the annual floods, white, green, and black.

Province of Auksoo.] This province lies to the N.E. of Kashghar and

of Peking, or 82° 27′ E. of Greenwich, in which Mr Remusat seems fully to acquiesce. Klaproth, on the contrary, who can let no opportunity of displaying British ignorance pass, says that Morrison's statement is wholly unworthy of credit, and was not taken from the Itoundohee, but from the notes accompanying a small planisphere in one sheet, published at Peking in 1795, with which the missionaries, members of the mathematical tribunal at Peking, had nothing to do. By Strahlenberg, in his map, it is placed in nigh 40° N. lat. and 81° E. long., the most erroneous of all the positions hitherto assigned Khotan, except by Rennel, who placed it in 40° N. and 75° E. long., or 41° 27′ W. of Peking. Its true position, as determined in the great map of the Jesuits, in 1760, is 37° N. lat. and 35° 52′ long. W. of Peking, or 80° 35′ 30″ E. of Greenwich. This position agrees with that of Sir George Staunton's Chinese map of the seat of the late war in Western Tartary, a copy of which is lodged in the India-house. From what we have stated of the great disagreement amongst our best modern geographers, respecting the position of Khotan, it may be safely inferred that our ignorance of the geography of Chinese Toorkistaun is deplorably great, and not likely to be soon removed.

W. of the province of Toorfaun, and comprehends the tract S. of the Teen Shan or Alak mountains, and the river Ili. These mountains and the subalpine tract contain, according to the Chinese accounts, much mineral and metallic produce, as gold, silver, and gems, and the soil in the valleys and lowlands is exceeding fertile. In the mountains near the source of the Auksoo, or White river, are mines of lead, sulphur, sal ammoniac, and silver. The chief places are *Outchei* or *Outcheeferman*, the *Uks* of Islenief, *Harashar*, *Koochey*, and *Auksoo*, but little more of them is known than their names. Koochay is a large place; and Harashar is probably the Kerasher of Izzet Oolah, a great Kalmuck city on the left bank of a navigable river that runs from E. to W. and has a resident Chinese governor. On the route westward from Toorfaun to Auksoo, the stream of the *Eela* or *Eelec* is passed, which has given its name to a city, in former days the capital of the Eluth Kalmucks. According to Izzet Oolah's Chinese itinerary from Peking to Khashghar, Eela is 15 journeys N.E. of Auksoo. This place is probably the Korghos of the maps, near the pass of Khongis, where a range of mountains separates the source of the Eelec from that of Hazitoo river, which runs S.E. to the Lake of Lop. Izzet Oolah was informed at Khashghar that the Chinese governor of Eellah had 100,000 men under his command, and some even raised it to 300,000 men; but recent events have completely disproved this enormous estimate. In his itinerary, a chain of mountains runs to the N. of Eelah, (whereas all the maps place it to the N. of that range,) and at the western extremity is a great lake of water called Azash-Kol, which is no other than the Balkhash-Noor.

Toorfaun.] This is the most N.E. province of Little Bukharia. It contained—if it does not now contain—a great number of cities, as the *Greater* and the *Lesser Yulduz*, *Karakoja* or *Oramshi*, the *Aramuth* of Benoit Gois, and *Toorfaun* itself. This district, though high and cold, is well-watered and fertile. Yulduz, the Cialis of Goes, signifies in Persian, 'the morning star,' from the beauty of its fountains and pastures, a most delightful place. The grass there is so nourishing, says Sherefeddin, as to fatten the leanest horses in a week's time. Toorfaun is a large city, where resides a Chinese governor and Mohammedan hakim. Some distance to the W. are the ruins of Old Toorfaun. Goes represents it as a strong well fortified city. In the Jesuits' map it is placed in 43° 39′ and 89° 36′ E. of Greenwich, and 26° 52′ W. of Peking, but in Sir George Staunton's map, where it is called Tooloofan, the Chinese being unable to sound the consonant *r*, it is placed at only 24° 30′ W. of Peking, or 91° 58′ E. of Greenwich, and in 43° N. By the Jesuits it is stated to be six days' journey W.N.W. of Hami, over a branch of the Cobi, but 10 days' by the hills to the N., which is reckoned the safer road. It must be remarked, that Toorfaun was not visited by the Jesuit missionaries, who made the map of Kansuh and Hami, and its site is fixed merely from itineraries and the reports of the people of Hami. The inhabitants of Toorfaun, says Haitho, the Armenian, in his Oriental History, ch. 2d, are called Jogoors; they abstain rigidly from drinking wine, and eating animal food. They raise much wheat, but have no vines. Their towns are very pleasant and contain many temples sacred to the worship of idols; they cultivate the arts and sciences, but are not at all addicted to war; they have a peculiar mode of writing, (the Oigoorian character,) which has been adopted by all their neighbours (the Mongols). The inhabitants of Toorfaun, says Shadi-Khuaja, who was there in 1420, are idolaters (Boodhists) who per-

form the ceremonies of their religion in spacious temples, on the carpets of one of them was placed a large image, which they called Sacyo Moonee, (the hermit Sacyo,) a Shanscrit appellation of Boodha. To the W. of Toorfaun eight or nine leagues, is *Hochew*, the ancient capital of the Oigoors, and still called Pe-ting-too-hoo-foo by the Chinese, says father Gaubil, in his history of the Ywen dynasty. According to the Mohammedan historians, *Bishbaligh* was the capital of the Oigoors, but this is a mistake, as Bishbaligh is far to the N.W. of Toorfaun, and in Soongaria near the base of the volcanic range called in Turkish Ak-taugh, 'the white mountain.' This district, and that of Ab-maligh, to the W., belonged to the Toorkish tribes and not to the Oigoors. To the E. of Toorfaun three days' journey, is *Karakoja*, or Aramuth, according to Shadi Khuaja and Goes. We have no other account of it, than that it is 35 caravan journeys N.E. of Khotan, and 31 from Tetkawl the frontier of China, where there is a wall between two mountains, in which wall is a great gate and caravanserais to lodge passengers, and where several soldiers are always stationed to guard the frontier and entrance of the wall. The Tetkawl of Sherefeddin can be no other than the fortress of Khyayuquan, at the western extremity of the great wall, in 39° 48′ N. and 17° 37′ W. of Peking, so that from Khotan to Khyayuquan by Karakoja, is not less than 66 days' journey of a caravan. But the direct road from Khotan to Khyayuquan, is stated at only 40 days' journey, but then it is wholly through the Cobi, without a single house or tent on the road, through moving sands, and where, though the water of the wells is easily come at by the thirsty caravan, yet in several it is poisonous, and kills the animals which drink of it.

Province of Hami.] This lies to the E. and S. of Toorfaun, and is merely an oasis of the Cobi, surrounded by deserts. The climate, says Du Halde, (not the missionary, as Malte Brun calls him, for he was never out of Paris,) is very warm in summer, but we are equally certain, that it must be very cold in winter, from its great elevation and that of the neighbouring mountains. We are told by Shadi Khuaja, in his route from Hami to Shachew, that he and his companions met a flock of yaks or Tibetian bulls, called by him *gao-kitas*. Now we know that these animals and the musk-deer cannot exist but in regions intensely cold or of great elevation. The gao kitas, says Shadi Khuaja, are said to be so strong as to support their riders for a considerable time on their horns. The mountains produce agates and diamonds, says Grosier, but the only vegetable productions are said to be melons and grapes, the former are of superior quality, and served up at the table of the Chinese emperor. The people are strong, able-bodied, active men, well-shaped and handsome. The city of Hami stands 90 leagues N.W. of Khyayuquan, the western extremity of the great wall, and 185 miles N.N.W. of Shachew, the most western fortress of China, in 42° 53′ 30″ N. and 22° 23′ 20″ W. of Peking by observation. Between these two places and Hami extends the *Shamo* or *Cobi*, full of arid shifting sands, and for 10 days' journey on the road from Shachew to Hami not a drop of water is to be found in the desert. Immediately beyond this, is a small pleasant grove of trees, and several springs, where the governor of Shachew entertained the ambassadors of Sharokh Mirza, on their journey to that city. The country contains, besides the capital, Hami, a number of towns and villages, as marked on the map, but beyond their names nothing more is known. The inhabitants of this province, like that of Toorfaun, were all Boodhists, and

Shadi Khuaja mentions the Boodhist temples as numerous and very splendid, and filled with an endless variety of images of all sizes. The dissolute manners of its Boodhist inhabitants are graphically described by Marco Polo, who says that they seemed born for dancing, singing, and revelling, just like the people of Khotan, of whom the Chinese writers give an account perfectly similar. Both this province and that of Toorfaun constituted the country of the Oigoors, so famed in Mongolian story. They have been incorporated with China since 1720, and made no part of the Eluth dominions conquered by Kienlong in 1757. Ebeide Oollah, the Mohammedan chief of Hami, for his services to Khanghee in the war with Kaldan, khan of the Eluths, was recompensed with the honour of having his troops enrolled under a distinct standard in the imperial army, and was honoured with the title of chief of the Shassak or legion of Hami. A grandson of his, called Yoosoof, having rendered new services to the emperor, obtained the title of *Wang* or king, and the pre-eminence over all the other chiefs of Hami or Kamoul. The prince of the Turks of Toorfaun, named Amin-Khojah, was for similar reasons created a Shassak, or head of a banner, in the reign of Yong-ching in 1725. He also received a *seal*, and his subjects were formed under a banneret, of which he was the commander. This was succeeded by the title of *wang* or king.

Thus we have gone over the geography of Little Bukharia as accurately as our limited information would permit, and shall conclude this part with observing that we have no account of the city of *Lop*, mentioned by Marco Polo, near the lake of that name, the eastern end of which is in 42° 20′ N. and 25° long. W. of Peking. The fountain named *Urtu Pulak* in the first sheet of the map of Tibet, is the most western position, geometrically determined by the Jesuits in the province of Hami, in the work of Du Halde.

Inhabitants.] These are composed of *Bukhars* or *Taujiks*, *Toorks*, *Kirgees*, and *Kalmucks*. The first are the same race as the Bukhars of Great Bukharia; and what has been said of them equally applies to those of Little Bukharia; but it would seem that they are most numerous in the province of Khashghar. The second class are the indigenous nomades of the country, whilst the two latter are intruders who have come here as conquerors. Respecting the *Oigoors*, who once and long inhabited the eastern parts, we cannot say what is become of them: whether they have mingled with the Toorks and Western Mongols, or have migrated to Tibet. But of this we are certain, that they have now no political existence, and no mention of them as a distinct race is made in modern times.—Respecting the language of the Bukhars and Toorks it is Toorkish, but so mingled with Persian, that Klaproth has ventured to pronounce Persian to be, if not the basis, at least the body of the language. Boodhism, at an early period of history, seems to have been imported hither from Hindoostaun, as is clear from the case of Khotaun and the number of Shanscrit terms and names used in that system, as practised formerly amongst the natives. But the system of Mohammedism gradually spread from Khashghar eastwards till it supplanted the Boodhism of Khotaun, Toorfaun, and Hami. In the middle of the 14th century, Togalak Khaun, a descendant of Jagatay the son of Zingis, embraced Islamism with all his Mongol subjects, to the number of 160,000 men. Ever since it has been the prevailing religion amongst all classes, the Eluths or Western Mongols excepted, if any such still wander in the steppes of this region.

SOUTHERN PART OF CENTRAL ASIA.

THIS extensive region may be divided into two great portions, the Western, and the Eastern: the former comprehending all the elevated tract watered by the upper courses of the Indus and Sutluj,—and the latter commonly and strictly denominated Tibet, and Great Tibet, together with the region of the Seefaun or Toofaun, and the extensive country of Tangoot. The whole of this region is bounded on the W. by the Beloor Tagh; on the N. by the Mooz Tagh; on the S. by the Great Himalaya, which separates it from Northern Hindostan, the upper valley of the Burrampooter, and the Birman dominions; and on the E. by China.

I. WESTERN DIVISION.

This again may be conveniently subdivided into the upper basins of the Indus and Sutluj, the former of which is the subject to be first described.

CHAP. I.—UPPER BASIN OF THE INDUS.

THIS comprehends all the tract from the Beloor to the sources of the Indus, having the Mooz Tagh on the N.; and the Hindookhoosh, or Western Himalaya, which separates it from Afghaunistaun and Cashmere, and the Caillas range, which divides it from the upper valley of the Sutluj, on the S. This large tract may be conveniently denominated *Western Tibet*, or the N.W. portion of it; the S.E. portion being confined to the upper course of the Sutluj. As this is almost an unknown region, it would be presumptuous in us to fix its boundaries by degrees of longitude and latitude. We shall content ourselves, therefore, with giving its leading divisions, beginning from the W. They are the following: *Upper Kaushkaur*, *Baltistaun* or *Little Tibet*, *Khofalun*, *Ladauk*, and *Changthang*.

Upper Kaushkaur.] Respecting the first, according to Elphinston's information whilst at Peshawer, Kaushkaur was represented as lying immediately to the E. of Badakshaun, to the N. of the Hindookhoosh, having the range of the Pamer, or the Mooz Taugh, on the N., and Baltistaun on the N.E. and E. In his map, it occupies a large triangular space, of which the Hindookhoosh is the base,—and the Beloor Tagh, and the range separating it from Baltistaun, form the two sides; whilst the N.W. junction of that range with the Beloor constitutes the apex or head of the triangle. Of this country almost nothing is known, but merely, that it is very cold and high, and is possessed by a nation called Cobi, who dwell in tents, and even have some towns. They are at present Mohammedans, and under several petty chiefs to the number of four, three of which are called respectively *Chitraul*, *Droosh*, *Mastooch*. S.E. of these are the *Dards*, bordering on Cashmere, to the S. and S.E., evidently the *Daradæ* of Ptolemy, who places them near the source of the Indus, in a very mountainous country; for he says expressly that the mountains of the Daradai '*maxime supereminent*.'[13] These Dards extend all the way E. to the frontiers of Ladauk, and infest the road from thence to Cashmere, ruining the villages, and carrying off the inhabitants, and selling them for slaves.

[13] If the word be derived from *Dhar*, a mountain-ridge, then the term means the mountaineers; but his Indus seems to have been the Abba Seen, which enters the Indus at Mullai, rising from mountains in the N.W. more than 20,000 feet above the plain of Peshawer.

Little Tibet.] To the N.E. of Kaushkaur, on the opposite of a lofty mountain-belt, is *Balti* or Little Tibet, evidently the *Byltæ* of Ptolemy, which he places next Mount Imaus,—'*juxta montem Imaum.*' Of this region we can say nothing, but that it seems to correspond to the *Toorkhend* of D'Anville, or his Toorkistaun on the Indus. It obtained this latter name probably from its being the abode of some Toorkish tribes; but how it obtained that of Little Tibet is unknown. It lies, however, wholly to the N.W. of the Upper Indus, to the W. of the principality of Ladauk, and to the S.W. of the Mooz Taugh. There is a caravan road through this territory to Khaushgaur of 44 days' journey; and the capital, Ascardoo, Eshkerdoo, or Shukerdoo, is said to be 8 days' journey from the northern frontier of Cashmere, and 14 from Cashmere itself. Beyond this is Shuker. From Shukerdoo to the northern frontier of Little Tibet is 15 days' journey, and 15 from thence to Khashgaur. The whole journey of 15 days through Little Tibet is said to be through thick forests, a circumstance indicative of a large subalpine tract clothed with wood.[14] We have no historical account of Balti, or Little Tibet, but only that in 1638 it was overrun by Zuffer Khan, one of the generals of Shah Jehan, when Shekerdoo and Shuker were both captured.

Khofalun.] The next division is the small state of Khofalun, which appears for the first time under that name in Moorcroft's journey to Ladauk. It seems to lie to the E. of Little Tibet, and to the N. of Ladauk, and to be the Kakalun of Izzet Oollah's route, 19 hours to the N. or N.W. of the pass of Karrakoorum; so that it apparently lies in the very centre of the Mooz Taugh. We have no account of it whatever, but merely that a very short pass leads from Kakalun to Baltistaun, and that the Kalmucks and Kirghees had profited much by means of it to make incursions into Little Tibet,—but that the inhabitants of the latter, in order to put an end to the mischief, had conveyed several mountain-streams into the defiles, which, being frozen by the intense cold, rendered the passage impracticable. The river of Kakalun, or Khofalun, seems to be that which, in his further progress, Izzet Oollah found to be called the *Yagni Dawan*, or 'the new pass,' *dawan* not being the same as *dawad*, 'a mountain,' but *duan*, 'a pass,' and which, in its further progress through this range of mountain country, is called the river of Misar, afterwards that of Khergalick, and which finally joins the river of Yarkund. Beyond Kakalun, 9 hours' journey on the right bank of the river, is Tagtah, opposite which is a mountain in which mines of copper have been discovered,—Tagtah, according to Izzet Oollah, signifying 'mines of copper' in Tibetian. We would rather suppose it Toorkish having no high notion of the Mirza's philology.

PRINCIPALITY OF LADAUK.] Till within these few years, this principality was a *terra ignota*, though its name has figured on the maps for nigh two centuries. The position of this city was the very opprobrium of modern geography. Save Moorcroft, no Europeans had ever seen Ladauk, excep two missionaries, Freyre and Desideri, who had reached it from Cashmere; and their account of the difficulties they experienced in the route

[14] Rennel places Shuker in 37° N. lat., 154 geographical miles N.W. of Cashmere, allowing 11 such miles for each day's journey of direct distance, a very improbable circumstance in so mountainous a country, as 8 miles a-day is abundantly sufficient; and supposing Shuker to be in 36° N. and 74° E. long., 30 days' journey of 8 geographical miles each would bring the caravan to Khashghaur, supposing it to be in 39° 25' N. lat. and 76° E. lon

was sufficient to appal the stoutest hearts from ever attempting it a second time.[15]—This territory lies in the centre of the very elevated upland

[15] A brief outline of Izzet Oolah's route from Cashmere to Ladauk, in 1812, has appeared in Elphinstone, and in the Oriental Magazine of Calcutta, which has thrown some faint light on the subject. His route was to the N.E., alongst the course of the Little Sinde, or Indus of Cashmere, to the village of Sonamurg, containing 50 or 60 houses, and the last station in that province, the road difficult and gravelly. Five coss N.E. is Yaltal, where there is a hospice for travellers. Beyond this, small hills separate Cashmere from Tibet. After escaping these heights, he arrived at Mutayen, the first place in the territory of Tibet, on the right bank of the river of Little Tibet, the inhabitants for the most part Mohammedans of the Sonnite sect. Farther on the route passes over the crest of a mountain, where are seen two great blocks of stone; the place is called Wagasagan. These stones mark the division of the waters, which descend on one side to Cashmere, and on the other towards Tibet. This crested mountain, therefore, should be the boundary, and not the small hills between Yaltal and Mutayen. Two coss to the E. of Mutayen is Panderras on a small stream, and four coss beyond is Diriras, (the Draus of Elphinston) the seat of a Tibetian governor called Kehrfuin, and placed by Elphinston, on the authority of Macartney, in 76° 48′ E. and 35° 55′ N. evidently too far distant for a place only 46 coss from Cashmere,—if Rennel's observation be correct, as undoubtedly it is, that in a very mountainous country (such as that between Cashmere and Ladauk) it requires more than 60 cosses of travelling distance to make a degree of a great circle. From Draus to Kerchao, 15 coss, a city encompassed, like Draus, with villages, the houses wooden and well built, the inhabitants Shiite Mohammedans for the most part. On that route two high mountains are crossed, between which is an open place where the caravans halt. Onions abound in these mountains, and cows with long tails like horse. These are the yaks of Tibet, now well known animals. To Peshkum, 7 coss, the place of a rajah, subject to that of Tibet, and a place agreeably planted with poplars and willows. To Buli 6 coss, beside which is a rock with a castle, the residence of a lama. On the rock are many sculptured images, and the people are Boodhists. There is a small convent of Ghyllongs, who possess the greatest part of the land in the vicinity. Barley and wheat are there reaped about the end of September. He successively passed the villages of Hancot and Lamyaruf in his route from thence to Khalach on the Saupo, which in Tibetian signifies the great river; and from thence by Sampoull and Nemek to Ladauk, 21 coss from Khalach, and 111 coss from Cashmere. Several attempts have been since made to reach Ladauk by way of the Upper Sutluj; and captain Herbert, who ascended the Speetee branch of the Sutluj, as far as Lar, the frontier village of the Sputee of Ladauk, believed that he could have gone on to Ladauk had he been desirous, being told that the road was good, the people not jealous, and imagined himself to be on the northern side of the crest of the great range. But succeeding travellers found Herbert to be mistaken in all these particulars. One traveller, in 1823, made two attempts to reach Ladauk, one by the lofty range where the Parati or N.E. branch of the Speetee originates, and another by the valley of the Speetee itself, over the Paralasa range to the N.W.; but both failed, from the depth of the snow and intensity of the cold. Captain Gerard made several attempts to gain Ladauk, one by the Parati river, and another by the pass of Tari, at the source of the Spino or S.W. branch of the Speetee river, and was repelled in both instances by Chinese jealousy. Mr Moorcroft was so fortunate as to reach Ladauk in Sept. 1820, by a different route from any which had hitherto been attempted. He went by way of Khot Kangrah, and early in July arrived at Shahjehanpore, the capital of the Kangra state. From thence he went to Sooltaunpore or Staunpore, capital of the Koolloo state, where he arrived on the 23d of the same month. On the 10th of August, accompanied by a caravan of Bukharian merchants loaden with specimens of British manufactures, along the Beyah or Hyphasis river, ascending a lateral range of the Himalaya, and crossing the Chunaub or Acesines by a jhoola or rope bridge, he arrived at Tandee, capital of the district of Lahoul, at or near the base of the great dividing range of the Great Himalaya, on the 21st of August. These names occur, for the first time, in the geography of the Western Hemalleh. Quitting this place on the 27th, he ascended the inclined plane of the great range, passing through a country partly desolate and partly cultivated, and crossed it at a great elevation by the pass of Bara-La, the table land of which is higher than the summit of Mount Blanc, and entered Lad-aleh or Lad-alaya, and reached Ladauk on the 20th of Sept. 1820. The difficulties of the route were great, and the variety of temperature encountered trying to the constitution. The party passed through the Punjaub in the hottest season of the year. On ascending the mountains, heavy and incessant rains retarded the route; and in the beginning of September, in crossing the Himalaya, the thermometer sunk to 8° below the freezing point. Mr Moorcroft resided at Ladauk for two years, from 1820 to 1822. Another intrepid traveller, ardent in the pursuit of Asiatic literature, Czomo de Koros, a Transylvanian, reached Ladauk, by way of Cabul and Cashmere, in 1822. He left Cashmere on May 14th, and arrived at Ladauk June 19th, after a journey on foot of 36 days. He intended to have gone to Yarkund, but was prevented by the Chinese authorities, and was on his return to Cashmere, when Mr Moorcroft met him and took

through which flows the Upper Indus, and which occupies the whole space N. and S. between the very lofty snow-clad range which bounds the valley of the Upper Sutluj and its tributary streams, and the equally elevated crest of the Mooz Tagh, the southern frontier of Bukharia or Chinese Toorkistaun. It is bounded on the E., it is said, by the Chinese province of Khotan and the Lhassan province of Changthang; on the S.W. and W. by Cashmere and Baltistaun, or Little Tibet; on the N.W. and N. by part of the latter region, and by Khofalun, and by the Karrakoorom range of mountains; and on the S. by the British province of Bischur, and the independent states of Kooloo and Chamba. Its extent is computed at 30,000 square miles, or half the surface of England. Its shape is that of an irregular triangle, the longest side or base of which forms the southern limit, running obliquely about 220 miles from S.E. to N.W., or from Bischur, by Koolloo and Chamba, to Cashmere. In this statement of boundaries, given in Hamilton's Indian Gazetteer, neither longitudes nor latitudes are given, and the Speetee of Ladauk is included within it. Now we demur to this latter part of the statement, as it confounds the valley of the Indus with that of the Sutluj; and the same range which separates Ladauk from the sources of the Kishengonga, the Little Sinde, the Chunaub, the Ihylum, the Rauwee, and the Beyah, also separates it from the valley of the Speetee and the Sutluj. Its being called a dependency of Ladauk is the ostensible reason; but it is no more a dependency of Ladauk, than Ladauk is of Runjeet Singh, to whom it pays a small tribute; and yet no one ventures to include Ladauk in the Punjaub. For these reasons we venture to make the Speetee of Ladauk, and not Bischur, part of its southern frontier. We have no idea how Khotan, a small district in Chinese Toorkistaun, and on the opposite side of the Mooz Tagh, the great dividing range, can possibly form its eastern frontier. The fact is, that its eastern frontier is unknown, with this exception, that Changthang, where the eastern and southern branches of the Indus originate and unite, lies to the S.E. of this principality, and is probably, like Ladauk itself, bounded on the N. by the same range of mountains continued to the E. Mr Moorcroft indeed says that the unexplored territory of Khoten extends far to the E. alongst the face of the Mooz Tagh, connected by irregular groups with Kentaisse, or the Caillas, and that the line of the ancient thoroughfare between Khashghar and India was through Khotan and Roodaukh, formerly the summer residence of the chief of Ladauk. But, in this case, Changthang must be included in the principality of Ladauk, and there can be no doubt that the district of Khotan lies to the N.E. of Changthang. But since Changthang is stated, in the above, to be distinct from Roodaukh and the eastern boundary of Ladauk, Khotan cannot be its

him back with him to Ladauk, and left him there to study the Tibetian language. Subsequently he rejoined Moorcroft at Cashmere, but again returned, furnished with funds by means of the India Company, and recommendations to the chief minister at Ladauk and to the Lama of Taungla. He remained in the establishment of the Lama at Zaischkar, the S.W. part of Ladauk, till June, 1824, when he left it for Stanpore in Koolloo, and proceeded thence, by Mundee, Sukhet, and Bullauspore, to Soobathoo in Bischur, in 1825, and from thence to Soonguaum in Koonawoor, where he was left very lately busily employed in studying the books of the Boodhist system in the Lama monastery, under the protection and patronage of the India government. It is matter of regret, that, from the untimely death of Mr Moorcroft, we have been deprived of his account of that unknown but interesting district, which would have proved a great accession to our knowledge of Tibetian geography, and dispelled the darkness that still remains concerning the upper course of the Indus. A few gleanings from his pen are all we have got; and these, together with what has been obtained from Izzet Oollah, are all the data on which we have to rest our present description of Ladauk.

eastern boundary, Changthang lying between. And as Khotan is altogether on the N. side of the Mooz Taugh, in 37° N. lat., that range is, in geographical strictness, the real N. and N.E. boundary both of Ladauk and Changthang.

Having little or no knowledge of the interior of Ladauk, it would be presumptuous to attempt any detailed description of its surface. It is quite evident, however, that, as it is merely a long and apparently narrow valley, watered by the Indus, and surrounded on all sides by lateral ridges descending to the main stream from the great ranges that bound the principality, its surface must be very rugged and irregular, having a constant interchange of hills and valleys, each watered by its mountain-stream, —in other words, a complete piece of net-work, which may indeed be represented on a map, but which language cannot describe. Many of the hills are of great altitude, but far inferior in elevation to the ranges whence they proceed; and the hollows between are profound, dangerous, and difficult to pass, which renders travelling laborious and tedious. It appears, that, after a journey of five days N.E. of Cashmere, an evident ascent commences, which is very great for four days successively, after which it is less, on to Ladauk. But still it continues even on to the great range which separates Tibet from Yarkund. To the left of this route the country is also very mountainous, but perfectly desolate, and on this account we have little information concerning it. A route from Deer, in Punjcora, passes E. through the southern part of this region, but it is excessively mountainous and difficult. Two marches before Izzet Oollah reached the pass of Karrakoorom, he fell in with an icy elevated range, called Khumdan, which, as he was informed, reached 200 cosses from S.E. to N.W., and which separated Baltistaun from the district of Surrikol, on the frontier of Badakshaun. Communication with the neighbouring countries, except up the valley of the Indus, is extremely difficult, whether with Cashmere, or Khashghar, or Yarkund, or Khotan, or the Punjaub, or the Speetee; every where mountain-ranges must be crossed ere Ladauk be entered, so that it is, as it were, an insulated region, secluded from the rest of the world, the course of the Indus being its only outlet. It is extremely well watered, from the numberless streams which run from valley to valley, increasing as they descend their rugged channels, till they reach their common receptacle the Indus. In the Cashmerian language, the principality of Ladauk is called *Booten*, (Bootan) says Izzet Oollah; by the inhabitants themselves *Ladagh*; and in Persian and Toorkish *Tibet*,—that word signifying, in Toorkish, shawl-wool. That shawl-wool is produced most abundantly in this mountainous region, is true, but it is not the reason of the name, which is more rationally supposed to be a corruption of the Tibetian words *Ten-boot*, 'kingdom of Boodh,' as Father Georgi thinks,—just as the word '*Boot-ten*' is '*Ten-boot*' reversed. The climate is very cold, as might be expected from its great elevation, and as lying between the Himalaya, Caillas, and Mooz Tagh ranges, which must influence its temperature very much. From whatever airth the wind blows, it must be from these snowy heights, and it communicates a sharpness to the air, of which people coming thither from the warm temperature of Hindostan must feel very sensibly. Mountains half-covered with snow during the greater part of the year skirt the plain at no great distance, where stands the city of Ladauk. Even in the month of June it freezes every night at Ladauk; and Moorcroft had still to use his warm furs along with his companions.—The city of *Lee*, or Ladauk, is situated on the eastern extremity of a plain, in the

recess formed between two contiguous hills of moderate height, with the summits of both which the town is connected by a wall terminating in some buildings intended for defence. The Sanpo, or Indus, flows about a coss to the S. of the place. The *gesibo*, or chief, resides in the middle of the town, in a lofty building, the form of which is precisely similar to the Tibetian edifices as depicted by the old travellers. The houses are of stone or unburnt brick, the beams of poplar-wood, the dwellings of three or four stories, and the city contains 1000 such. The valley of the Sanpo here is from 2 to 4 coss broad for a distance of 17 coss up the river, and is very richly cultivated with wheat and barley. As the territory of Ladauk is almost entirely composed of hills and moors, it is a grazing country for almost every species of graminiverous animals, especially horses, and sheep, and goats. The dogs of Tibet are twice as large as those of Hindostan, having large heads, long coats, and so amazingly fierce and strong, as to be singly a match for a lion. This exactly agrees with Marco Polo's account of the Tibetian dogs; and indeed the more we learn of these regions the more strongly is the veracity of the illustrious Italian confirmed. The bushy-tailed cow, or *yak*, of Tibet, is common to the whole of Western Tibet, and is an invaluable boon to the natives, both as a beast of burden, and as perfectly fitted, from its constitution and habits, to carry the traveller over the loftiest heights, or convey him across the most impetuous torrents. The ponies of Zaishkar sell from 20 to 70 rupees each. They are very fleet, sure of foot, and cross the highest passes with ease.[10] The produce of shawl-wool in this country, Moorcroft observes, is immense, and more than 60,000 persons in Cashmere obtain their living solely by the manufacture of it; but in consequence of the grinding oppression of the Afghaun government, more than 4,000 shawl weavers emigrated in 1820, and 6,000 more were expected to emigrate in 1821. Ladauk abounds in fine timber for ship-building, and if it were possible—which it is not—to transport it down the Indus to the Punjaub, it would be a most invaluable acquisition.—Of the mineral produce of Ladauk we

[10] Had Moorcroft been spared, or his papers been recovered, we would have received a satisfactory account of the zoology of Ladauk. As it is, however, he has communicated an interesting account of a new species of sheep called *purik*. In this communication he states the novelties he found, in the department of natural history, to be so many and great, that to describe them in any sort of detail would require a large volume. This animal, says he, is, when full grown, scarcely so large as a South Down lamb of five or six months old; yet, in the fineness and weight of its fleece, the flavour of its flesh, and the peculiarities of its constitution, it is inferior to no race. It is as completely domesticated as a house-dog. All night it shelters in a walled yard, or under its master's roof. In the day it feeds often on a surface of granite rock, where a blade of vegetation can hardly be seen; and when the land is cleared of harvest and stubble, and not a stalk of vegetation appears, its indefatigable industry detects substances so minute and uninviting, as ordinary sheep could neither see nor take, even in Ladauk. The purik sheep will examine the cooking-pot, pick up crumbs, drink the remains of a cup of salted and buttered tea or broth, or nibble a cleanly picked bone. Leaves of lettuce, rinds of turnip, skins of apricots, are luxurious fare; and the residuum of the coarse black tea consumed by the natives, after being steeped, and the decoction conducted with the utmost frugality, are devoured by this animal. It gives two lambs annually, and is twice shorn within the same period, the clip affording 3 lbs. of wool annually, the first crop being fine enough for tolerably good shawls. Moorcroft affirms that a British cottager could keep three of these sheep easier than he could a cur-dog, as they would live luxuriantly by day on the stripes of grass that border the roads, and by keeping clean hedge bottoms. He also mentions a nondescript species of wild horse, called *kiang*, which he thinks might be domesticated for the use of the small farmer and poor in Britain. It is about 14 hands high, of a round muscular form, with remarkably clean limbs. This species of horse is found in a district of Changthang, in a part called Kanree, or 'the snowy mountain;' but it may perhaps be the *Equus Caballus*, which is found wild in almost every part of Central Asia.

have no account whatever, save that Izzet Oollah tells us of mines of sulphur three stages from Lei; and that saltpetre abounds, and that very excellent gunpowder is made at Lei.—But the chief glory of Ladauk is the commerce which it enjoys, as the great entrepot of all the produce of all the pastoral region of the upper valley of the Indus, and as a common resting place for all the caravans that go from Khashghar, and Yarkien, and Khotan, to Cashmere and Afghaunistaun, or from these latter to Chinese Toorkistaun. It is the great emporium for all the shawl-wool which is produced in the districts of Changthang and the Oondes, and which is subsequently exported to Cashmere.[17] Three grand fairs are annually held in Lei or Ladauk, one in October, one in February, and a third in August. The second of these is the greatest fair. At these fairs the concourse of Mussulmauns from Khashghar and Yarkund, of Lamas from Lassa, Teeshooloomboo, Deeggarchee, and Ghortope from Amritsir, and all the Punjaub, and of merchants from Cashmere and all other places, as Khoonawur and Khoollo, is said to be immense,—all of whom pay duty for their merchandise; and the valuable productions of all these regions are poured into Ladauk, which seems to be an entrepot for their riches, to be re-exported by the various natural channels to their ultimate markets. From Hindostan are imported every species of Hindoo manufactures and produce, as Mooltaun chintzes, the silks of Benares and shawls. From Yarkund come silver, Russia leather, felt carpets, coarse and fine China silks, taffeties, velvets, earthenware, sable furs, small coral beads, and seed

[17] It was calculated, that in 1820 the value of the shawl-wool manufactured in Cashmere was from L.500,000 to L.600,000 sterling; and in 1821, Runjeet Singh, the Seik ruler of the Punjaub, then in possession of Cashmere, farmed the duty on the importation of shawl-wool into Cashmere at 13½ lacs of rupees, or L.160,000: 800 horse-loads of this wool go annually hence to Cashmere each horse-load weighing 28 tereks. The wool is obtained from the hide of the goat, and is distinct from the hair, which is very long and shaggy. It is this double coat of very fine down, or wool and hair, which enables these goats to stand the intense cold of a Tibetian upland. The Latakees have shawl-wool goats likewise, but not in numbers sufficient to supply the demands of Cashmere and Amritsir; and if, at a future period, the produce of this article, raised in Changthang and the Oondes, should be sent to another market, the Latakees would be compelled to rear more goats themselves. But even this would not do, as the cold is not so severe in the vicinity of Ladauk as to the eastward, where the mountains are higher and constantly covered with a large quantity of snow. As matters have stood for nigh a century, and still stand, the Latakees enjoy a complete monopoly of the shawl-wool produce. The reason assigned is, that in the reign of Mahmood Shah, the Mogul sovereign of Indoostaun, the Gealbo of Ladauk, unable to contend with the Tartars to the eastward, applied for aid to the governor of Cashmere, who represented it to Mahmood, who sent Ibrahim Khan of Cashmere to their assistance, defeated the Tartars, (the Kalmucks according to Izzet Oollah,) and restored the Gealbo to the possession of his capital, who, out of gratitude, acknowledged himself a vassal of Mahmood, and paid tribute to the Hakim of Cashmere, and coined money in the name of the emperor Mahmood. In consequence of this defeat of the Tartars, an article was inserted in the treaty of peace between them and Ladauk, that the Latakees should have the sole privilege of buying up, at their own price, all the shawl-wool produced in the districts of Roodauk, Ghortope, and the Oondes of the upper valley of the Sutluj, in the vicinity of its source; and the sale of this article to any other save them, by the inhabitants, is forbidden under pain of death.—Even the Cashmerians, though allowed to attend the fairs of Roodauk and Ghortope, and dispose of their merchandise, are prohibited from purchasing the shawl-wool, but must receive it at second hand from the Latakees, and even a duty of 4 rupees, or 10s., is charged by the Latakees on every horse-load of shawl-wool exported to Cashmere; but no duty is levied on it when imported into Tibet from other countries. A duty of 4 rupees is charged on every terek weight of Cashmere shawls when exported to Yarkund. So much is Cashmere dependent on Ladauk for its supply of shawl-wool, that whoever is the political ruler, whether a Mogul, an Afghaun, or a Seik as Runjeet Singh the present possessor, he must be on good terms with Ladauk, because, were it otherwise, all the shawl weavers of Cashmere would be instantly thrown out of employment, and the Hakim would lose all his duty on the importation, amounting to at least L.150,000 annually.

pearls. Tea, of which large quantities are drunk at Ladauk, is brought from Lassa, and pays a small duty.

The question, whether Ladauk was a detached sovereignty from Tibet, as Father Desideri maintained, and which Malte Brun was unable to determine, is now solved; and it is ascertained that it is altogether a distinct state from Tibet, though closely connected with it by political, commercial, and ecclesiastical bonds. The Chinese chief of Takklacotte assured Webb that the authority of the emperor of China extended as far as Ladauk, which, however, was independent of China. This doubt arose from the extended application of the name *Tibet*, or *Tobbhot*, which included all the vast region between China, Tangoot, the two Bukharias, and Hindostan. Hence it was concluded, that since Ladauk was in Tibet, it must be a province of it, and not a distinct independent state. But it was forgotten that the appellative *Tibet* was not so much a political as an ecclesiastical designation, like the terms, Christendom, Eeraun, Belad-al-Islam, and Kaufeerustaun denoting the region of the faith of Boodha. Ladauk is actually an independent state, though Runjeet Singh sent a vakeel in 1819 to demand tribute. In fact, it is the interest of all the neighbouring states that Ladauk should be independent, and it is to this sense of common interest that it owes its independency. It is the interest of the Chinese authorities, both to the N. and E., that Ladauk be protected, as it is the great market for their shawl-wool, and as the great transit of commercial intercourse with Hindostan; and it is equally the interest of Cashmere that Ladauk be independent, to insure a constant supply of the precious shawl-wool for its favourite manufacture of shawls. The great difficulty of access to it, surrounded as it is on all sides by the loftiest mountains of the globe, is another cause of its independence; for the expense and trouble of keeping up a constant military communication with it across such mountain-ranges and difficult passes would be enormous, in addition to the certain loss of all the revenue derived from the importation of the shawl-wool, and ruin of the Cashmere manufactures; and the exportation of that material, so essential to Cashmere, would be diverted to another channel, namely, the districts of British India, next to the Oondes. As the character of the natives is that of a quiet, inoffensive, unwarlike race, the country could be easily overrun, did not the above considerations stand in the way of its conquest. All religions are tolerated at Ladauk; but the established religion is Boodhism, and the chief, whose title is *Gealbo*, or rajah, sends a yearly donation to the Dalai Lama of Lassa. Whenever a son is born to the rajah, he abdicates the sovereignty, and the ministers govern in the name of the prince. The principal ministers are the *Ghylong*, or lama, who acts as deputy, the *chaghut*, or steward, and the *mu-aghten*, or military commander. During this period the Ghylong is perfect master of the supreme authority, and the Gealbo takes no part in state affairs.

The dress of the natives is a coarse cloth made of sheep wool, and in winter the poorer sort wrap themselves in the skin. They wear very high black caps falling over one ear, shoes of undressed hide, within which they sew woollen cloth that comes up to the middle of the leg; their hair is plaited like that of women, and falls down in a braid behind; they shave the beard, but preserve the mustachios; the lower part of the tunic is straight and scanty, whilst the upper part is folded, all in one piece. The tunic is made of black or coloured woollen. The women wear turquoises, emeralds, and pearls, woven with their hair. The Gealbo has no claim to

any part of the crops, but derives his income from a tax on the head of each house, and he levies one or two rupees annually according to the ground, which is divided according to the water consumed in irrigation.[17]

District of Changthang.] This very mountainous tract lies to the E. and S.E. of Ladauk, and contains the sources of the Indus. On the N. it is bounded by a continuation of the same great range which forms the S. frontier of Chinese Toorkistaun; on the E. by another lofty snow-clad range running N. from the Caillas to the Mooz Taugh; and on the S. and S.W. by the Caillas range which divides it from the head valley of the Sutluj river. This tract is subject to the government of Lassa, which has an officer named the Garpan, stationed at Ghortope, to manage its temporal concerns. It is entirely a country of pasturage, where immense flocks of sheep, goats, yaks, and wild horses, feed. It is wholly composed of mountains and valleys, watered by innumerable torrents, all emptying themselves into the Indus, the valley of which is the widest, and bordered with snowy mountains and high table-lands. The climate, as might be expected, in a country perhaps the loftiest on the globe, is severe, much more so than at Ladauk; the winters are long, and the summers only two months annually, and Gortope is habitable, it is said, only four months in the year. Snow falls here even in July and August. On July 16th, the thermometer stood at 34° in the morning, and the tents were frozen on the road from Daba to Gortope, which led through defiles of frozen snow and ice; on the 31st of the same month, thermometer 34° and ice 3-4ths of an inch thick; on the 10th of August, thermometer at 32°, and the tents covered two inches thick with snow which fell from the preceding midnight till nine next morning. The atmospheric changes are rapid, frequent, and severe, during summer, with thunder, lightning, rain, hail, and snow, one day, and fine serene sunshine, another. The inhabitants are compelled to wear very thick clothing to prevent cold. The outer garments are striped woollens from Guinak in Chinese Toorkistaun, and beneath these are four other garments worn by both sexes to preserve heat. The very animals, as the goats, the yaks, the wild horses, wild asses, mules, and the bharals, have all coats of fine thick fur beneath their heavy coats to protect them against

[17] One problem solved by Moorcroft is the site of Ladauk, which strongly evinces the importance of his journey to geographical science. He has fixed its site in 34° 9′ 21′ N. lat., a position exceedingly different from any previously assigned to that city, as will appear from the following table:

SITE OF LADAUK.

		E. of Greenwich.
Lamas' map, corrected by the Jesuits, - -	30° 52′ N.	74° 37′
D'Anville, in his general map, - - -	33 20	77 17
Rennel, in his Memoir of a map of India, - -	34 30	77 30
Marsden, in his Edition of Marco Polo, - -	34	
Izzet Oollah, in his journey from Cashmere to Ladauk,	37 10	
Elphinstone's map of Caubool, - - -	37	78 10
Frazer's Tour in the Heemalleh range, - -	32	76 32
Arrowsmith's map of India, - - -	35	78 10
Hamilton's Indian Gazetteer, 1st edition, -	35	78 10
——— Hindostan, - - - -	36 30	78 10

Here are differences amounting to 6 and 7 degrees of latitude, and not less than 3½ of longitude, in respect of the Jesuits' edition of the Lamas' map. It is curious to observe that the latest authorities, as Elphinstone, Izzet Oollah, Frazer, and Hamilton, are widest of the truth; and it is equally curious that in a memoir of Anquetil Du Perron, with a map attached to it by Mr Poirson (Mem. de l'Academie des Inscriptions et Belles Lettres, tom. xlix. p 512), the latitude of Ladauk is fixed as it should be by the constructor of the map, but Anquetil Du Perron himself cautions his reader against trusting to it, wisely observing, that it is better to consult the map of D'Anville and the

the severity of the climate. The same is the case with the hare, the cow, and the dog, and indeed with every known animal in the district, so provident has nature been in clothing them, and the sheep have very long and shaggy coats. It is astonishing to think that such an elevated region, far exceeding the plains of Quito, Los Pastos, and even the table land of Titicaca, should be capable of feeding such immense droves of cattle, tame and wild, solitary and gregarious. The number of sheep, goats, and yaks, grazing in the vicinity of Gortope, could not, in Mr Moorcroft's opinion, be below 40,000. The pasturage is abundant and of the very best kind, but how these animals are supported during a winter of nine months, when all the grounds must necessarily be covered with snow, is difficult, if not impossible to divine; the subject requires elucidation. This region abounds also in minerals, especially gold; all the torrents abound with it, and there are many gold scours. The hills—stated to be rich in gold—are granite of mixed colours, according to Mr Moorcroft, the red predominating, with horizontal strata of quartz, and small fibrous veins of a white material like agate, descending perpendicularly. The gold is here separated by washing, as there is little or no fuel in the vicinity, or rather no wood. Several gold pits were met with on the road from the Sutluj to Gara, and two gold mines were working, with tunnels under the surface, and the materials are carried to the river and there washed. Cinnabar of antimony seems also to abound. Borax is found in the lake of Tchallatchaka, nigh Roodauck, and in great quantities in the places neighbouring Gara, Mapang, and Ladauk. Such a lofty, cold, and wintry region cannot contain much population, the chief part of which seems to be employed in tending sheep, goats, and yaks. Villages are scanty, the habitations being chiefly tents, a collection of which makes a pastoral camp. The only villages of importance in this superalpine region are *Tuhzagong* and *Routho*, or *Roodauck*. The former is merely a frontier Chinese post on the banks of the Indus, here called *Eckung Khampa*, or 'eastern branch,' which rises in the lateral range connecting the Caillas and the Mooz Taugh, and is joined, as reported, a little below this place by the southern branch or river of Gara called the *Sing-choo*, which rises 20 B. miles S. of Gara, in the S.E. angle of the valley, formed by the junction of the eastern range, which bounds the valley, with the Caillas. Tuhzagong is a fortified village built of mud and stones, where two Chinese officers reside, who regulate all public affairs, and watch over the public concerns. It contains about 30 houses within the walls. A place called *Guinak* by Moorcroft, and said to be 20 days N.E. of Gara, and the capital of Tartary, is the quarter whence the Bhoteas receive all their woollen cloths. Such a place is not found in any of our maps. It seems not to be the name of a place, but of a region, and is a Tibetian appellative. The Tibetians give the appellation of Ghia, *the great*, or *the very dispersed*, to many nations. Singly employed, it is ordinarily applied to the Chinese, and chiefly to those in the Lesser Bukharia and Soongaria, who are denominated by the Tibetian compound appellative, *Ghia Nagh*, black Chinese, a term exactly corresponding to the *Kara Kitai* of the Mongols, and the modern Kara Kathay. Guinak, therefore, is Little Bukharia or Chinese Toorkistaun; and probably the city of Khotaun is the place intended, as it really lies to the N.E. of Gara, is a place of importance, and the capital of a district.

CHAP. II.—UPPER BASIN OF THE SUTLUJ.

THIS S.E. division comprehends the *Speetee of Ladauk*, *Khoonawoor*, and the *Oondes*.

Speetee of Ladauk.] This district has Chayanthang on the E.; Ladauk on the N.; Koolloo on the S.W.; and Bischur, or rather Khoonawoor, on the S. and S.E.; and pays tribute to Ladauk, Koolloo, and Bischur. It is composed of three subdivisions watered by the Speetee, the Paratee, and the Pinoo. The natives are all Tartars, and worshippers of Boodh. The villages are from 12,000 to 12,500 feet above the level of the sea, but towards Ladauk they are still more elevated; the country is also very barren and the climate inhospitable. It is every where environed by lofty snow-clad mountains, and is itself intersected with various ranges, the sources of innumerable torrents, descending to the three principal rivers, or to the Sutluj itself, through Khoonawoor and Koolloo. The range on the side of Ladauk, which divides its waters from those of the Indus, is very lofty, and must be crossed in order to enter Ladauk. The natives—who are of the same stock as their neighbours of Ladauk—are represented as a rapacious race, having all the vices but none of the virtues of real savages. They are cowardly and assuming; their youth is without honour, and their age without respect. They are ragged and greasy, and nature has not favoured their outward form. Their chief villages are *Lar*, 11 miles N.W. of Shealkhoor, and 11,071 feet above the sea; *Manes*, on the same stream, 11,900 feet above the level of the sea; *Dunken*, a fort of 40 houses, built of stone and mud, and situated amidst rugged projections of gravel, 1,500 feet above the Speetee and 13,000 above the sea; and *Tengdi*, 12,000 feet above the level of the sea, on the S.W. branch of the Speetee.[13]

District of Khoonawoor.] This picturesque and rugged region lies immediately behind the southernmost range of the great Himalaya, and occupies the lower part of the course of the Speetee river, and the Trans-Himalayan valley of the Sutluj, as far up as Shipke. It has the Speetee of Ladauk on the N.W., from which it is divided by a range of great elevation, by the upper part of the territory of Ladauk on the N. and N.E., by the Oondes on the S.E., and on the S. and S.W. by the Hindoo states of Bischur and Koolloo; but its western limit we cannot exactly specify, and as little can we assign its extreme points of longitude and latitude. According to captain Herbert, it extends from 31° 33′ N. lat. to 31° 51 N. lat.; and from 71° 47′ E. long. to 78° 42′ E. long., exclusive of the Purgunnah of Hangarang, on the lower course of the Speetee. This region may be said to lie within clusters of mountains sheeted with perpetual snow, there being no table-land or undulated plain in any part of it. The inhabited portions, are confined to the valleys of rivers, or gorges of torrents, and the villages are scattered along their banks at a general elevation of

[13] It was the intention of the two brothers Gerards to have proceeded up this branch to Ladauk by the pass of Tari, which is the most direct road. But entreaties, and an offered douceur of 150 rupees, were unavailing; the Lafa, or chief of Tengdi, would not hear of their proceeding onwards, or attempting the Tari pass. After a fruitless negotiation of two days, our travellers were compelled to return to Manes, and recross the Darbung pass to Soongnaum in Khoonawoor. Tartar guards are every where posted, by the careful jealousy of the Celestial court, to prevent all access into Chinese Tartary on the side of Khoonawoor; and mandarins have been despatched by the court of Pekin, since the suppression of the late revolt in Chinese Toorkistaun, to the country of Ladauk to warn the people against the admission of strangers into that region.

9000 feet, but in the interior they rise to 12,000 feet, and even more. The seasons vary with the height of the level; in the lower regions of the valleys the climate in summer is warm. The finest grapes occur near the margin of the Sutluj, and in the dells of streams flowing from the snow, where the solar reverberation is great. In this region also the finest honey is gathered. At the height of 9000 feet and more the climate is delicious; our European fruits come to perfection, and the forest-trees and all the wild flowers of our country are spread over the soil. In the valleys on both sides of the Sutluj, in Lower Khoonawoor, not less than 18 kinds of grapes, distinguished by several names, derived from colour, shape, size, and flavour, are raised to the greatest perfection, at an elevation of more than 7000 feet, even up to nigh 10,000 feet. Some are dried on the tops of houses, some made into spirits, the rest eaten ripe. All this fertility and variety of produce is the effect of concentrated warmth, produced by the reverberation of the solar rays from both sides of the glens; the climate being quite different in this respect from what takes place in the exterior chain of the Great Himalaya, where the heat is reflected to it but from one side, and therefore is much less than in the interior clusters and ranges, where there is a strong reverberation from all quarters. According to Gerard, the frontier range on the side of Ladauk and Chinese Tartary is granitic. Limestone, however, prevails to an elevation of 20,000 feet, and sandstone is found at an elevation of 16,700 feet. Horizontal strata of sandstone, marle, and loam, in the most regular layers and at prodigious heights, are found the granite resting on clay, and the sandstone above granite, in the valley of the Speetee river. Eastwards of this the table-land is strewed over with ammonites at an elevation of 16,500 feet. Nay, Dr Gerard found mussels and cockles at the height of 15,500 feet above the sea, at the northern frontier of Khoonawoor. The presence of these organic remains at such a stupendous elevation attests that the sea once covered these heights.[11] The other predominating masses of rock are clay slate, and mica slate, and blue slate, and gneiss. At the junction of the Speetee and Sutluj the cheeks of the gulf of the former are granitic, and perfectly mural for many hundred feet. Great numbers of sheep and cattle are reared here, and great quantities of wool, both raw and woven, are exported. Yaks are bred in the remoter parts in great numbers; and next to grain, these animals are accounted their greatest wealth. There is also a mixed breed between the yak and common hill-cow raised by the natives. The inhabitants of Khoonawoor are reputed to be Hindoos by descent, but their physiognomy is more indicative of a Tartar origin. They are very black, with now and then a flush of red in their faces. They are clearly a distinct race, in features and in manners and language, both from the Hindoos, and the Bhoteas, or inhabitants of the other mountain states. They have all an openness of countenance and a frankness of conduct and manner quite different from what is witnessed in the people of Bischur, Koolloo, and the Speetee of Ladauk. An unbounded confidence is placed in them by the Latakees, Cashmerians, and Bhoteas, who find them strictly honest. All our travellers, as Fraser, the Gerards, Herbert, and others, agree in this character of the natives, as distinct from

[11] These specimens, as Colebrooke justly remarks, are not Saligrama stones containing the impressions of ammonites as in the upper valley of the Gunduk, but ammonites themselves, and cockle-shells, thus proving that organic remains of a former world have been found at elevations far surpassing those at which they have been found in the Andes of Quito and Peru.

all around them. The natives of Khoonawoor all profess the religious system of Lamaism. Not less than five different dialects are spoken in Khoonawoor; and each resembles the other in a multitude of words. The words differ chiefly in their terminations, but the language itself is totally different from that of the Bhoteas, and also from any spoken on the southern side of Himalaya. The people of Soongnaum speak the Tibetian dialects, and a language totally different from that of Khoonawoor. In such a mountainous region no cities can be expected; villages only, and these small, are found in the bottoms of the valleys, or on the banks of rivers or torrents. Our limits will not allow us to indulge in topographical details; but the following is a table of the elevations, &c. of the beds of the Speetee and Sutluj in Khoonawoor:

Bed of the Speetee at Rangreek, the highest ascended spot,	12,600 feet.
Do do Fort of Dankar,	11,500
Do do Manes village,	11,400
Do do Lari do	10,582
Confluence of the Speetee and Paratee,	10,200
Bed of the Speetee at Shealkhur village,	10,113
Do do Chango do	9,900
Confluence of the Speetee and Sutluj,	8,220
Breadth of the Speetee at its junction with the Paratee,	72
Do do at Shealkhur,	92
Do do of the Sutluj at its junction with the Speete	106
Height of the rope-bridge over it at this confluence,	78
Bed of the Sutluj at Numjea,	8 600
Breadth of do at do	75
Bed of the Sutluj at Pooaree village,	6,537
Do do junction with the Bhaspa,	6,300
Do do at Wangto Jhoola,	5,200
Breadth of do	92
Bed of the Sutluj at Rampore, capital of Bischur,	3,260
Do do Neert 12 miles below,	2,912
Direct distance from Neert to Numjea,	71 miles.
Average descent of the Sutluj by this, per mile,	78 feet.
Road distance from Neert to Numjea,	110 miles.
Average descent of the Sutluj by the road,	42 feet.

Oondes, or highest valley of the Sutluj.] Whilst the Speetee of Ladauk pays a small tribute to the surrounding states, and Khoonawoor, as a dependency of Bischur, is under the surveillance of the British government in India, this large district has remained under the sway of the Celestial court ever since Tibet was placed under a Chinese viceroy, subsequent to the expulsion of the Ghorkalees, in 1792. This region has the Speetee of Ladauk and Khoonawoor on the N.W.; the district of Chayanthang and the Khaillas range on the N.; Proper Tibet on the E. and S.E.; and on the S. and S.W. it is parted from the districts of Kemaoon, Gurwhal, and Bischur, by the stupendous Himalaya. It includes the whole upper valley of the Sutluj, from the pass of Piming S.E. to its termination in the angle formed by the junction of the Himallah and the Caillas, S.E. of the Mansarawar lake. It includes also the valley and course of the Paratee river, the main branch of the Speetee up to its source in the great dividing ridge which separates this district from the territory of Ladauk. It is surrounded on all sides, except at the gorge of the Sutluj below Shipke, by the Himallah and the Caillas. The whole thus inclosed is called the *Oondes*, or *Oorna Disa*, that is, 'the land of wool,' by the Hindoos. But we are told, on later authority—that of captain Hodgson if we remember right—that the term *Oondes* means 'the land of snow.' Both terms may apply well enough to it, as it abounds in both articles, and the shawl wool goats cannot exist but in a snowy region such as this. It is sub-

divided into a number of districts, of which we only know some of the names, as those of *Chaprong* and *Toling*, to the N.W. of Daba, and those of *Takklacote*, and *Gharewdon*, or *Gurdon*, to the S.E. Of the two ranges which inclose it, that of the Caillas is seemingly the highest; and the angle where the two ranges meet is perhaps the loftiest spot on the terrestrial surface, being the great dividing line whence the rivers of Tibet flow to different points of the compass. Whilst Mr Moorcroft and his companion Mr Hearsay have the credit of being the only Europeans who crossed the frozen defiles of the Caillas since the days of father Andrada succeeding travellers have only had a glimpse of that more northern range which bounds on the S. the upper valley and source of the Singchoo or Indus. The range appears to run in a N.W. direction, and has its sides and summits very thickly covered with snow. It is clearly seen from the passes of Keobrung and Hangarang; and from this latter pass it was seen so thickly covered with snow that not a rock could be distinguished by a telescope of large magnifying power. The prominent features in this lofty valley are the two famed lakes of *Rhawanhrad* and *Mansarowar*, through which the Sutluj runs. These lie S.E. and N.W., and the latter is S.E. of the former. They have not yet been sufficiently explored on all sides, so as to enable us to give a clear and distinct account of them. The *Mansarowar*, or 'Sacred Lake,'—for the appellation is Shanscrit,—is bounded on the S. by the Himallah; on the E. by the prolongation of the Caillas; and on the N. and W. by very high land, under the form of mountain, table-land, ravine, and slope, all declining towards it as a profound fluid hollow. Its shape approaches to an oval, lying between 81° 10′ and 81° 25′ E. long. and 30° 12′ and 30° 23′ N. lat. according to Moorcroft's map of his journey, being 15 miles long by 11 broad. It must be remarked, however, that he did not see its eastern extremity, so that we cannot be exactly sure of its longitudinal extent. Though both in the Lamas' map and by the universal consent of the Hindoos, the Sutluj (the southern branch of the Ganges in the Lamas' map) issues out of this lake, yet Moorcroft could find no outlet from it on the N.W. and S. sides, yet the Chinese governor of Takklacote assured Mr Webb that the Mansarowar lake had but one outlet and that into the Rhawanhrad lake; so that both Moorcroft's pundit and the Latakee traveller were right in affirming that it had a communication with the latter lake, and Moorcroft wrong in denying it. This outlet, it seems, however, is frequently dry, and it is probable, as Webb thinks, that the difference of level between the two lakes is considerable, and that a subterraneous communication must exist between them, as one periodical channel could not possibly carry off the redundant waters of more streams which fall into this oval bason. It is surprising that Mr Moorcroft never thought of tasting the water, as that would have gone far towards determining the point. As it is about 80 miles S.E. of Daba, and the nearest point of the Sutluj to the Nitee pass, whose river-bed is 14,924 feet above the sea, the elevation of this lake must be considerably more: there is, perhaps, 2000 feet of difference at least, as the course of the Sutluj is so rapid that our traveller could hardly keep his footing though mounted on a yak. Between the low and high water mark are numerous skeletons of yaks, which, in going towards the lake in severe weather, fall into the drifts of snow which then fill the intermediate space. A great many Lama monasteries and temples front this lake in elevated situations, with all the usual insignia of the worshippers of Boodha. The former appear to be retreats for both sexes, as a nun came out of one of

them and accosted Moorcroft under the appellation of Goonee Lama, and invited him to her rocky dwelling, which he declined. This lake is held in the greatest veneration both by Hindoos and Tartars, and all the nomade shepherds. The Tartars and shepherds carry the ashes of their deceased relatives and scatter them on its waters. There are also many terraces of stone covered with inscriptions; but, instead of copying them, as Moorcroft and his companion might have done, they contented themselves with cutting their own names on a stone. This certainly could answer no useful purpose, whereas had they copied the inscriptions, and carried or sent them to Calcutta for the inspection of the Asiatic society, they might have proved a valuable acquisition to Tibetian learning. The changes of temperature here are frequent and sudden, and the surface of the lake is almost constantly agitated by very high winds sweeping down the slopes of the surrounding mountains. It is frequented by large flocks of grey geese (the swans of Hindoo poets) which breed in the surrounding rocks, and many aquatic eagles, whose nests are perched on the tops of lofty and inaccessible crags. It is altogether a wild and romantic place. The *Rhawan-hrad*, or 'Lake of Rhawan,' is much larger than the Mansarowar, and reported to be four times its size, but Moorcroft was unable to explore it from indisposition and want of time, and only saw it from an eminence. It consists of two legs which are long and not very broad, one running eastward towards Mansarowar, straight, and ending in a point, the other goes S.E. amongst the hills, and their divergence forms an angle almost straight opposite the town of Darchan or Gangree. On its borders vast numbers of wild geese are bred, and both lakes abound in fish, especially the latter. It is well fed by numerous streamlets from the Caillas on its northern side, and probably also a large body of water falls into its southern side from the Himallah range. Some of its sides are fringed with grass of considerable height, and in the warm season the lands at the mouth of the streams which feed it are a complete swamp. Vast numbers of wild horses, gurkhars or wild asses, yaks, and bharals, sheep and shawl-goats, feed on its borders and on the southern slopes of the Caillas. The Saturdra, or Sutluj, is formed by the junction of the branch coming from Rhawanhrad and the Terat river, which, in its turn, is composed of two streams, one from the southern crest of the Caillas, and which is separated from the source of the Indus only by an intervening ridge, the other, called the river of Tirtapooree, comes from the high land which, on the N.W., bounds the valley of Darchan or Gangree, which, in its turn, is separated from the basin of the Mansarowar by another ridge of high land. The face of the country, climate, soil, and productions, whether vegetative, animal, or mineral, are all so similar to those already described in Changthang and the Speetee of Ladauk, that farther description may almost seem needless; one fact, however, we cannot avoid noticing, that the farther we advance N. from Hindostan into this superalpine region, the limit of cultivation rises. S. of the Himallah its extreme limit is 10,000 feet, but here it rises successively from 12,000 to 13,600 and 16,000 feet. In the vicinity of Daba, Doompoo, and Takklacote, all of these villages more than 15,000 feet above the sea, the finest crops of a grain called ooa are raised, of which the natives make excellent bread. This grain is pronounced by Dr Wallich, who received specimens from captain Webb, to be a new species of wheat, and the farina or meal made from it is remarkably fine. This hardy grain, of which samples have been sent to the royal society, is found at an elevation of 16,000 feet. Near Gangree, Moorcroft

met a convoy of 70 yaks loaded with this grain. The grass in the vale of Tirtapooree is mowed and carried as winter provision for the horses of the chief of Daba and those of the people of Kienlung, Doompoo, and Daba. They are also fed during the same time with the ooa or wheat above mentioned. It is cultivated in terraces, and watered by cuts from the sources of the streams that form the ravines in the slopes of the higher grounds, and the produce of the crop shows that with sufficient irrigation the soil would be very grateful. The quantum of solar heat developed in this plateau must be very great, considering that the summers are only two months in duration, from the middle of June to the middle of August. The extension of this great central plateau, instead of cooling the superincumbent atmosphere, has the effect of raising its temperature by the radiation of the heat collected from the rays of the summer sun, whilst the surface of slender peaks, as in our European region, affording not the means of such radiation, suffer the heat to rise into the higher strata, where the capacity for caloric is greater. As the heat, says Humboldt, of high regions of the atmosphere depends on the radiation of the plains, it is conceived that under the same geographical parallels one may not find in the system of transatlantic climates (he means the climates of Quito and the Andes) the isothermal lines (lines of equal heat) at the same elevation above the level of the sea as in the system of European climates. Had he thought on this, when writing on the height of the plains of Tartary he would certainly never have dreamed of comparing the effects of the latter with those of the very circumscribed plains of Los Pastos. His own very elaborate and scientific account of the elevated plateau of Mexico might have convinced him, had he thought of it at the time, of the absurdity of the comparison, as he found, by actual experiment, the line of perpetual congelation in 19° 20′ N. lat. to be 15,090 feet above the sea, or only 617 feet lower than on the side of Chimborazo, and 1,530 feet higher than it is in Leslie's table, a difference only of 617 in 20 degrees. But the extensive upland of Titicaca, in Upper Peru, is a striking instance of the modifying influence of local circumstances on temperature. There the inferior lines of perpetual congelation, in the eastern range of the Andes, is 17,000 feet, or 1,253 feet higher than on the side of Chimborazo under the equator, and that in 17° S. lat., so that the mere circumstance of latitude does not determine the limit of perpetual congelation. On the summit of the Nitee Ghaut, in 31° N. lat., the temperature was found to be 47° at 3 *p.m.* by the thermometer at an elevation of 16,814 feet on the 21st of August. Moorcroft found it on the 1st and 2d of July, at sunrise to be 41° and 44° and on the banks of the Sutluj, where he crossed it on the road to Ghortope, the thermometer was 56° at sunrise, and rose to 96° in the tent, during the heat of the day: and this at an elevation of nigh 15,000 feet. Even at the Mansarowar lake, which is perhaps equal in elevation to the Nitee Ghaut, the thermometer, at sunrise, varied from 47° to 49°. But it must be remarked, that there is a great difference between the temperature of a confined valley and that of an open pass like that of Nitee. At Zongching, the highest village in Khoonawoor, the thermometer rose to 68° at mid-day at 14,700 feet of elevation, on the 23d of July. At Zinchin, a resting-place in Chinese Tartary, but belonging to the Oondes region, the thermometer rose to 60 in the shade, and fell to 42° at sunset, and early next morning was so low as 30½ degrees. This place is 16,136 feet above the sea, and the eminences rise many hundred feet higher. In every direction horses were seen galloping about, and feeding on the very tops

of the heights, as also droves of yaks, kites, and eagles, soaring in the air, large flocks of linnets flying about, and locusts jumping among the bushes. Here, at the height of 16,000 and 17,000 feet, is abundance of metoh (fuel) bearing a beautiful yellow flower and no prickles, and a fine and serene sky; whilst in crossing the southern range of the Himallah, at a far inferior elevation, no firewood is nearer than five or six miles, the clouds hang round the mountains, the sun is rarely visible, and rains are frequent and heavy. At Zinchin, the atmosphere exhibited that dark appearance, often observed in elevated situations. The sun shone like an orb of fire, without the least haze. At night the part of the horizon where the moon was expected to rise, could scarcely be distinguished before the limb touched it, and the stars and planets shone with a brilliancy never seen but at great heights. With a transit telescope of 30 inches and a power of 30, stars of the fifth magnitude were distinct in broad day, but none of less size were perceptible. At Soobathoo Math, 4,200 feet above the sea, stars of the fourth magnitude require a power of 40 to make them visible during the day. Here the ground is covered with fine green sward, the stream gently winds through beds of rich turf, and no points of rocks are seen. In its bed are many large flowering shrubs, from three inches to eight feet high, which Moorcroft took to be a species of tamarisk. The same mineral appearances exist here as in Chanthang. All the torrents abound in gold dust. Gold is also found in the district of Danga Boukpa, 12 journeys S.W. of the Mansarowar Lake. A new mine, which furnished large lumps, was lately opened between the lake of Goungeou (Rawanhrad is perhaps meant) and Mansarowar, but by an order from Lassa it was entirely shut up. Moorcroft met at Gangree or Darchan three tea-merchants, who came from a place two months beyond Pekin, which they called the capital of *Mahachin*, the Sanscrit appellation of China.

Subdivisions and places of note.] As the eastern extremity of this region only has been visited by Mr Moorcroft, our knowledge of it, as to particulars, is solely confined to that portion. Whatever other information we possess is mere hearsay, derived occasionally from a native on the frontier, or from travelling merchants, and therefore both inaccurate and imperfect. The chief divisions seem to be: that of *the Valley of the Paratee* on the N.W.—the district of *Chaprongh*, extending W. to Shipke,—that of *Toling* to the E. of it,—and then that of *Daba*,—followed to the S.E. by others, the names of all of which are not known, but amongst which are those of *Taklacote* and *Gurdon*. The *Paratee* river flows through a long narrow valley, bordered on both sides by snowy mountains. It comes from the N.E. according to Gerard, whereas Fraser, in his map, derives it from the N.W.[11] *Birgeo* is a fortress on a nullah of the same name, with towers and loop-holes, garrisoned by the Bhotea inhabitants. Five days journey from Birgeo the Paratee is lost amongst snowy mountains to the left, and amongst these is a large salt lake, called *Choomaorcreel*, 13 coss long by 6 coss broad. In winter it is completely frozen over; but in

[11] Mr Fraser's information was both imperfect and incorrect, for he has confounded the Paratee with the Speetee, and was ignorant of the fact that the Speetee is composed of three streams: the *Spino*, the *Spectee*, and the *Paratee*, the two former belonging to the Speetee of Ladauk, whilst the last is wholly within the Chinese territory. The village of *Chooret*, near the mouth of the Paratee and on the left bank, is the frontier village of the Chinese territory, and about a mile and a half to the S.W. of it Gerard and his party were stopped by a party of 50 Tartars, who would not allow them to move a step farther in that direction.

summer, the climate around is said to be very fine. It is open, free of reeds and swamps, and abounds in fish and water-fowl, and is fed by streams from the mountains which surround it.[12] Beyond this point the road is over a completely uninhabited desert, occupied here and there by a few tents of Bhotea shepherds, with their flocks of shawl-goats, sheep, and yaks. On the Sutluj, the most western village of this region is *Shipke*, in 31° 48′ N. lat. and 76° 44′ E. long., 10,600 feet above the sea and 1,600 feet above the river. Immediately behind it is a lofty peak, rising to 20,150 feet above the sea, and 9,550 above the village, making an angle of 28 of elevation above the horizon. S.E. of this is the village of *Bekkhur*, 12,676 feet above the sea and 1,884 above the Sutluj, which is here 10,792 feet above the sea.[13] *Chaprong*, the *Chaparangue* of Andrada, is said to be eight days up the Sutluj, from Shipke. It is described as a large town, in a plain covered with short grass, and totally bare of wood. *Daba*, visited by Moorcroft, is 10 British miles N. of the Nitee pass, in direct distance. It is divided into three parts,—a college, the residence of the Lama and his ghyllongs, or monks,—a nunnery,—and the houses of the Wazir, the Deba, and the laity in general. The town is upwards of 15,000 feet above the level of the sea, and is not merely a summer-habitation as Moorcroft imagined, but a permanent residence. The houses are of stone, two stories high, white-washed on the outside, and surrounded with a band of red and French grey above, having terraced roofs fenced with parapets. The insides are very filthy, the floors of the small yards which lead to them being covered with bones of sheep and goats, and locks of wool. The priests of Daba have their processions, their prayers, and their music, morning and evening. Their chaunts are generally accompanied with cymbals and the beatings of deep-toned drums, and the performance is preceded by the blowing of conchs from the top of the temple. The people of Daba wish much to have a commercial intercourse opened up with the British side of the frontier, but permission has hitherto been refused by the Chinese. Respecting *Takklacote* and *Gharewdon* we have no information, but only that the latter is seven miles N. of the former, and separated from it by an intervening range of the Caillas. They seem to be the *Takla* and *Kerton* of the Lamas' map.

II. EASTERN DIVISION, OR TIBET PROPER.

Extent and Boundaries.] This is a very extensive region, reaching from the sources of the Indus and Sutluj, in 81° E. long., to the western frontier of Sechwen, in China, in about 100° E. long., and from 28° to 35° N. lat. This tract has the Cobi or Desert on the N. separating it from the eastern part of Chinese Toorkistaun; the Eluths of Kokonor on the N.E.; the Seefaun or Toofaun and the province of Sechwen on the E.; the province of Yunnan on the S. E.; the Burman dominions, valley of Assam, Bootan, Nepaul, and British India on the S.; and Western Tibet on the W. These are its boundaries generally speaking, but its particular limits we cannot accurately determine for want of materials.[14]

[12] As a road to Ladauk goes up the Paratee valley this lake is probably the *Dsookeoong Somtee* of the Lamas' map, to the S. of Ladauk.

[13] This was the highest point up the Sutluj attained by Gerard. The breadth of the Sutluj at Shipke was only 67 feet, but it was deep and rapid, and running at the rate of more than 100 feet per mile to its junction with the Speetee 11 miles below.

[14] We have almost nothing but Chinese information, communicated through the channel of the Jesuits, to guide us here; with a few gleanings from Marco Polo, and such Romish missionaries as have visited it, for the purpose of converting the natives

Names and Divisions.] *Bhodt*, (Tibet or Bhotan) and *Bhodt-iool*, or 'kingdom of Bhodt or Boodh,' are the most ordinary denominations of Tibet, and the most usual designation of the people is *Bhoteas*. It is sometimes also called *Bhot-yid*, or 'country of Bhoodh' The name of *Thebeth*, *Thibet*, or *Tobbhote*, known to the Arabians and Persians as early as the 10th century, is not used by the inhabitants themselves. According to father Giorgi, Tibet (pronounced *Tibbet* in Bengal) is a corruption of the Tibetian appellation *Tenboot*, or 'kingdom of Boodh,' the same as Bhodt-iool given above. According to father Hyacinth and Klaproth, the Tibetians add the word *ba*, signifying *man*, to the word *bhot*, and call

to the Roman catholic faith, as fathers Andrada, Desideri, Horace de la Penna, and the monk Cassiano. Horace spent 18 years in Lassa, and might consequently be supposed qualified to give us a tolerable account of Tibet, and his account of the mission to Tibet was printed at Rome in 1742. A long and curious account of Tibet, in 900 quarto pages in Latin, has been given by Father Giorgi, printed at Rome in 1762, and entitled *Alphabetum Tibetianum*; but Cassiano is the real author of the book. Another misfortune is, that these productions throw very little light upon the geography of Tibet, the missionaries being naturally and properly much more taken up with the religion than the geography of the country. Not above 19 or 20 pages are devoted in Giorgi's large work, to the latter subject, but an itinerary from Catmandoo to Lassa is fortunately given, which slightly illustrates the geography of the intervening space. We have, in addition to these, an account of two embassies from the British East India Company to the Grand Lama in 1774 and 1783, the former by Mr George Bogle is given in the Philosophical Transactions, and the latter by captain Turner, published in 4to. 1800. But these concern only that part which lies between Bootan and Lassa. We have preserved in Kircher a very short itinerary of Fathers Grœber and D'Orville all the way from Sining to Lassa and from thence to Catmandoo in Nepaul. But it is so meagre that little satisfaction is got from the perusal. A Chinese account of Tibet was published at St Petersburgh in 1828, by Father Hyacinth, long resident with the Russian mission at Peking, in two vols. 8vo. the first contains the geography of Tibet, the second its history and conquests, religion, manners, and customs. Along with the work, is inserted a chart of the road from Tschendu to H-lassa (Chingtoo in Sechwen to Lassa.) From an analysis of its contents as given in the *Bulletin Universel*, the first volume is merely a book of routes, with observations, from Chingtoo to Lassa and from Lassa to Teeshooloomboo, and from Siningfoo in Shensee to Lassa. The orthography of the names of places is so different from what has been usually employed in Du Halde's maps and other works, as to render it a very difficult business to identify them. These, in conjunction with the Lamas' map of Tibet are all our materials for a description of the country, and it is matter of deep regret that that map is wholly founded upon routes without a single observation of longitude or latitude made in the whole work, which detracts materially from its value. Klaproth has observed that these maps of the Chinese empire, made by the missionaries under Kanghee, were very imperfect extracts of the Chinese and Manshoo originals, and the proper names were translated by a person but little versed in the Chinese language, and these materials were put into D'Anville's hands in order that he might reduce and superintend their publication. The maps made by order of Kienlung, he remarks, differ materially from those of the missionaries under Kanghee, so far as respects Tibet both in the longitudes and the latitudes, as in the case of the exit of the Sanpoo from Tibet. In the Chinese originals of the Jesuits' maps, the place of exit from Tibet is placed in 27° 30′ N. lat. and 20° 50′ W. of Pekin, and not in 26° 40′ N. lat. and 20° 20′ W. long. as in Du Halde's faulty copies of these originals. Now in the maps of Kienlung, this position is placed in 28° 40′ N. and 19° 30′ W. of Pekin. He remarks farther that the greater the distance from the meridian of Pekin, the more erroneous are the longitudes in the Jesuits' maps of Tibet. We also know that the position of Paridrong in these maps is a degree too far S., as is shown by Rennel himself, and the entrance of the Ganges upon the plains of India was in these same maps two degrees to the S. of the place where it actually enters India. Such being the errors of the Lamas' map, we cannot place much confidence in its accuracy, and Klaproth has not told us if in the maps of Kienlung, those of Tibet were founded on astronomical observations. Not having seen these maps, we are unable to determine whether they are founded on observations or merely on routes, like their predecessors under Kanghee. We believe the latter is the case, and that the case is the same with Father Hyacinth's translated Chinese work on Tibet. Had a triangulation of Tibet been made as was the case with China, we would not have been in the perplexity we are in at present, respecting the true geography of Tibet, the courses of the great rivers, and the points where they leave the Tibetian plateau and enter the Burman dominions. As we have stated the case fairly to our readers, they will see the impossibility on our part of giving any thing beyond a very general account of a country so little known and so inaccurately represented in the very best of modern maps.

themselves and their country *Bhotba* and *Bhotbas.* The Mongols use the term *tu* in place of *ba,* and call Bhotba, *Tubat,* of which Europeans have made Tibet. According to this etymon, the name Tibet is originally Mongolian, and passed from the Mongols to the Persians and Arabs, and there can be no doubt that Marco Polo got the name from the Mongols when residing at the court of Khublai Khan. It is also called *Poy,* or *Pue Koachim,* the 'region of snow.' The Chinese sometimes call it *Scefan,* or 'Western Fan,' though that name be now restricted to the region between Tibet and Sechwen. Sometimes they denominate all Tibet by the name of *Chlassa,* and at other times by that of *Shan, Sceshan,* or 'the western part of Shan;' and the name *Shan*—or as Klaproth writes it, *Dzang*—is also given to the city of Chlassa (Lassa). *Tangoot* is a Mongolian word, by which is designed all the region which touches the western frontier of China, and which is inhabited by Tibetians. But the Tangoot, conquered by Jenghis Khagan, was distinct from Tibet, and seems to have comprehended the Seefaun or Toofaun, the region of Kokonor to the W. of Shensee, the district of Kansoo, part of Shensee, and the Ortoos Mongols. Tangoot is known in the Chinese annals under the names of the kingdom of *Seeasp* and, *Hya,* and *See Hya,* or 'Hya of the west.' *Oui Dzang,* or *Shan,* is an ancient name of Tibet, compounded of the two words, *Oui* and *Dzang.* The Chinese transcribe this name by *Ou-szu-thsang;* and the Mongols render it by *Barohn-djao,* 'the right side,' or 'the West.' Its geographical divisions are involved in obscurity, and the terms *High, Middle,* and *Lower Tibet,* are vague and unmeaning. Marco Polo found it divided into eight kingdoms: provinces would have been a more proper term. Father Giorgi gives it twelve provinces: viz. *Latak,* already described, and now known to be a distinct sovereignty from Tibet; *Nagaree,* which seems to correspond to the N.W. part of Tibet, already described; *Hor,* with the lake of Terkiri; *Kiang, Daum,* and the principality of *Kahang,* in the N.; *Amdoa* on the E.; *Brediong,* or *Bramasciong,* on the S.; together with *Takbo* and *Congbo,* and in the centre the provinces of *Ou* and *Chang;* the *Oui* and *Dzang* of Klaproth. Of these, *Bramasciong* seems to be to the N. of Assam, and near the source of the Brahmaputra, and E. of Bootan. On a close inspection of the Lama's map, we find the tract watered by the Sanpoo, E. and S.E. of Lassa, to be divided into *poys* or *poois,*—a term signifying a province, region, or district. The tract to the S. and S.W. of the Sanpoo, betwixt it and the Om-choo, is called *Tak-poy* or *Tak-pooi,* that is, the province of Tak, which comprehends a considerable number of inferior divisions, and which does not at all correspond to the Bootan on the side of Bengal, as Malte Brun imagined, but is clearly the *Tac-po* of Giorgi. On the opposite or N.E. side of the San-poo is the province called *Konk-poo-i* in the same map, also subdivided into a number of districts. Now this is clearly the *Congbo* of Giorgi; and to the S.E. of this Konk-poo-i, or Congbo, is the province of *Ken-poo-i,* between the Sanpo and the Noo-keeaung; and further E. of this, is the country or district of *Dsanclo,* (the Shanclo of Marco Polo,) between the Lautsan-keeaung and the Kincha-keeaung, or Brius of Marco Polo. We speak here solely on the authority of that map. *Amdoa* is considered by Malte Brun to correspond to the *Ardandam* of Marco Polo. But this is merely putting the difficulty a little out of sight; for a reader will ask, where is Ardandam? Malte Brun indeed tells us that Ardandam is the S.E. part of Tibet, and as he makes it the same with the *Amdoa* of Father Giorgi, Amdoa consequently is the S.E. part of Tibet.

Unfortunately for this conjecture, both Marsden in his notes on Marco Polo, and after him Klaproth, have shown in the clearest manner, that the Ardandam of that noted traveller makes no part of Tibet, but is altogether correspondent to the S.W. part of the province of Yunnan in China, of which Yongchang is the capital, called *Unchian* (not *Nokian*, as in Malte Brun,) by Marco Polo. The name of this district, besides, is not *Ardandam*, or *Arcladam*, as Malte Brun has written it after Muller's edition of Marco Polo; nor is it *Kardandam*, as Marsden has it; but Zar-dandan, a Persian appellation, signifying 'teeth of gold;' because in that district gold is so abundant, that every man wore a small plate of that metal as a cover to his teeth, according to Marco Polo, and which was exchanged for an equal quantity of silver, brought to them by the inhabitants of Mien, (Birmah,) as it was not to be found at all in the country of Caridi. Malte Brun has also identified *Caridi*, as he writes it with *Ardandam* or *Zardandam*, whereas the proper reading is *Carazan*, and not *Caridi;* and it is a corruption of Karadjang, or 'the black country,' the N.W. part of Yunnan, from the colour of the people, called *Ouman*, or 'black barbarians,' by the Chinese. The capital of this district is the modern Ta-li-foo, called Dai-leiou by the Chinese, and the capital of an independent state till destroyed by the Mongols in 1255, subsequent to the conquest of Tibet. According to Marco himself, he took five days journey on horseback W. from Ta-li-foo to the province of Zardandan. The Caraiam of Marco Polo was not Assam, as Malte Brun imagined, and which, in his fancy, had some relation to the Garrow mountains, but lay to the W. and N. of Karadjang, and was called Karayan by the Mohammedan writers, and Thsuonman by the Chinese, who call the people Carains. The large lake of Eul-hai, or Tali, separates Karayan from Karazan or Karadjang. We dissent totally from Klaproth in placing Caraiam to the S.E. of Karazan, and making it the south part of Yunnan, which is inhabited by the Mons. Caraiam extended N. and W. as far as the Caindhu of Marco Polo, on the Bruis, or Kincha Keeang, or 'river of golden sand,'—not the Brahmaputra, as Malte Brun imagined, —nor the Sanpo, as Klaproth dreams, or his Irrawaddy,—but the genuine Kincha Keaung of Tibet, and the north-west part of Yunnan.—From what we have been able to gather from these confused and imperfect accounts of the divisions of Tibet are the following: 1*st*, *Nagaree*, towards the chain that divides the sources of the Indus and Sutluj from Upper Tibet, and which contains the sources of the Yarou Sanpo, the Keaung-koo, and other large rivers; 2*d*, *Kam*, probably the *Kahang* of Giorgi, called by him a principality; and *kam*, in Tibetian, means the kingdom. It lies S.E. of Nagaree; 3*d*, *Karra Tœbet*, on the *Yarkia-Sanpoo;* 4*th*, *Hor*, on the N. side of Tibet; 5*th*, *Congbo*, on the left of the Sanpoo; 6*th*, *Tac-po*, on the right of that river, and both S.E. of Lassa; 7*th*, *Bregiong*, to the W. of Congbo; 8*th* and 9*th*, *Oui* and *Chang*, both comprehended, according to Father Hyacinth, in the province of Chlassa, and called Oochang; 10*th*, *Jiamdo;* 11*th*, *Zanba*, or *Teeshooloomboo;* and 12*th*, *Amdoa*, on the borders of Sechwen. As for the districts of *Keeaung* and *Daum*, we cannot fix their relative positions.

Physical Features.] Tibet presents, on an inspection of the Lama's map, the most confused assemblage of mountains, valleys, lakes, and rivers, that can meet the eye, resembling a piece of net-work; and to attempt a verbal description of such an apparent chaos would be to make confusion

worse confounded; and as no triangulation of this vast region was ever made, as in the case of China, we cannot depend on the accuracy of the relative positions, nor the directions of the interior chains. The declination of the slope, as indicated by the courses of the rivers, seems to be chiefly to the S.E. and E. From China to Tibet is a very sensible ascent the whole way; and the mountains, which are very numerous, are far higher above the horizon on the side towards China than on that towards Tibet; but when once they are passed, there is a descent, and the climate is much more mild; and the country less wild and savage, than it is on the borders of Sechwin and Yunnan. According to the account of a Chinese officer, who served in the war of 1792 against Nepaul, the army took 72 days to march from the frontiers of China to the vicinity of Lassa, 12 days more to Upper Tibet, and 15 days more to the western range which separates Tibet from Nepaul—total 99 days to the seat of war. The passes, in his account, are spoken of with horror, some of them requiring a whole day to cross; and, when once attempted, must be passed before night, as there is no halting place, nor any possibility of travelling in the dark. The Chinese generals were compelled to dismount and walk over these tremendous mountains, instead of riding across them, as they are totally impervious to cavalry. But on the side of Hindostan the descent is much more rapid than on that of China, as being much shorter. When once the pass of Pharee is passed, the contrast between Bootan and Tibet is striking. It appears to the eye as one of the least favoured countries under heaven, and seems in a great measure incapable of cultivation. It exhibits only low rocky hills, without any visible vegetation, or extensive arid plains, both of the most stern and stubborn aspect, promising fully as little as they produce. But the very gradual descent of 70 British miles, from this pass to the Sanpo, was all that Turner saw of Tibet.

Mountains.] Those of the S.W. and S. towards Hindostan are the only ranges known to us, as geographically described by such of our travellers and surveyors as have reached them,—Bogle, Turner, Webb, Colebrooke, Crawford, and others; and the elevations of some of the passes and peaks towards India have been already given. The mountains, on the side of Kemaoon, Nepaul, and Bootan, correspond to the *Emodus* of the ancients, the Sanscrit *Heemadree.* There are, properly speaking, three distinct ranges, the Northern, the Central, and the Southern Emodus; the first of which is invisible from the plains of Hindostan, and bounds the valley of the Sanpo to the S., and is not perforated by rivers. The central range is that immediately to the N. of Nepaul, and which is perforated by several rivers, as the *Gogra*, the *Ghandauk*, the *Arun*, and the *Tusta*—all branches of the Ganges; but amidst such tremendous precipices, and by such narrow gaps, as to render their openings generally totally impracticable. It was through the pass of the Arun, by Lungercote, that the Nepaulese army retreated from Teeshooloomboo; but another division, which took the pass of Kootee, (the *Cuthi* of D'Orville and Grueber) to the west, lost 2000 men amidst the snow. The pass of Mount Langur, or Lungercote, is represented by the above fathers as the most tremendous and precipitous they had encountered all the way from Sining in Shensee. This central range is upwards of 40 miles in horizontal depth, and at the source of the Tusta it is denominated *Khaœa Karpola*, or 'the mountain white with snow.' The southern range is that called by Kirkpatrick the *Kuchar Alps*, immediately N. of Catmandoo; and there its

summits are not, as he imagined, covered only with patches of snow, but with perennial snow to a very great extent. The distance from Catmandoo to Lassa is 536 British miles, or 462 geographical miles, by the road, according to Father Giorgi, but not above 300 geographical miles in direct distance, supposing Lassa to be in 29° 35′ N. lat., as in the Lama's map; so that more than one-half the space traversed is taken up with windings, from the very mountainous nature of the road. It must be remarked, however, that Rennel has placed Catmandoo 33′ too far N., and Lassa a full degree too far N.; but he had no other way of fixing them but by routes in his map. According to father Giorgi, Mount Langur is 50 road miles beyond Mount Rimola, (the southern Himmaleh,) and abounds in suffocating exhalations, which increase as it is ascended by the pass; and 25 miles beyond this is the beautiful alpine valley of Tingri,—an earthly paradise in every respect but the sharpness of the air.

Topography.] At the southern foot of Mount Langur is the fortress and town of *Tankya*, the first place recognised in the Lama's map; and 90 miles beyond this is *Zuenga*, on the Bontsu. From hence two roads lead to Lassa,—the most northern by Sgigatche, (the *Jiekse* of the Lamas,) and Ringboo,—and the other by Kiangtse. Here wild horses, variously spotted, are seen sporting in great numbers on the banks of the Bontsu. *Kiangtse* is a fine city and fortress, with a convent of Ghyllongs, so very extensive and magnificent as to seem another city of itself. Fifty miles beyond this, to the N.E., and within three days' journey of Lassa, is the famous lake of *Paltee*, or *Jamdro*, or *Jangso*, said to be so large by the natives as to be 18 days' journey in circumference; but in the Lama's map the circumference is only 150 miles. In the middle, according to Ciorgi, is a continued range of hillocks and islands; or, according to the map above-mentioned, and the only one we yet possess, one large island, encircled by a lake from three to eight miles broad. On the western shore of this island is a monastery, and the seat of a Lama priestess, called *Lamissa Turcepamo*, a female incarnation of Boodha. The road from Kiangse to Lassa lies alongst the north side of this singular lake, a day and a half's journey. Between this lake and the Sanpo is a very lofty range, called *Mount Kambala*, which travellers must cross in the way to Lassa. From the summit of this elevated range is seen, towards the N., a still higher range, covered with during snow. Seven miles beyond the base of Mount Kambala is the Sanpoo, which 12 miles farther on is crossed by a bridge of iron chains, stretched from side to side, with planks or logs laid across. This chain bridge is composed of 500 links, each a foot long, laid across the narrowest part of the stream, which here is very deep and rapid. N.E. of this crossing place of the Sanpoo is the famed city of *Lassa*, 24 miles distant by the road. Thus is Giorgi's itinerary of the route from Catmandoo to Lassa correct in its details, but, unfortunately, no bearings of the route are given; and the same is the case with Mr Bogle's route from Coosbeyhar, Tassisudon, and Paridrong, to Chanmanning, the then residence of the Dalai Lama; so that we are in the dark respecting the particular direction of both routes; and these are all we have to rest on for the relative positions of place, in the total absence of observations of latitude and longitude. Turner, in his journey to Teeshooloomboo, entered Tibet at the pass of *Pharce*, called Paridrong and Paridsong in the Lama's map, which was ascertained to be a full degree too far S. in the Lama's

map, as Rennel justly suspected, being in 27° 58′ N. lat., and 89° 1′ E. of Greenwich. The pass ascends steep for 12 miles up the southern face of the dreary Soomoonang till its summit be scaled. On this is a long row of small inscribed flags, fixed in rude cairns of stones, and fluttering in the wind. These mark the boundary between Tibet and Bootan. To the N.E. of this a few miles, is the noted peak of *Chumularee*, visible at a direct distance of 232 British miles. At the foot of the pass is the sterile vale and fortress of *Pharee*. The road goes to *Tushooloomboo* almost due N. along the banks of the *Painomchoo*, by *Tueena*, *Sumdta*, *Chaloo*, *Nainse*, and *Jhansee Jeung*, the distance from Pharee about 70 British miles direct. E. of this we hear of no other passes through the Himallah to Tibet. E. of the Langtang mountains, which separate Assam from the valley of the Seree Serhit, all the way to the frontiers of Yunnan and the course of the Lookiaung, a distance of 100 British miles at least, in the parallel of 27° 30′, the range continues an unbroken course, of tremendous elevation, and skirted at its base by a large tract of rugged subalpine country, impracticable even for the hardy mountaineers themselves, and all communication is apparently barred to the N. The range seen from the summit of Mount Cambala is that of *Koiran*, esteemed the highest in Tibet, and runs to the S. of the lake of Terkiri. The only reason assigned for its superiority of elevation to the other chains is merely the circumstance of its central position, but it is no conclusive proof. The range to the W. is perhaps equally elevated, and communicates with the Moos Taugler to the N. and the Himmalah to the S. It is called *Kentaisse* and *Kantcshan*. The names *Malaya* and *Kelasch*, signifying 'snowy mountains,' are corruptions of the Sanscrit Himalaya, and Kailasa, or Khaillas. The Sanscrit *Rimola*, applied to the dividing range between Tibet and India, has been corrupted by transcribers into *Morinl*, as appears in the geographical maps of the 17th century. Respecting the other interior ranges, we can say nothing as to their elevation, or whether they are groups or ranges, as the maps present us with nothing but a confused assemblage of mountains, lakes, and rivers, which it is impossible to describe in words.

Lakes.] This very mountainous region contains a host of lakes, a great number of which have no outlet, especially in the northern part. The *Terkiri* is 70 miles long and 25 broad, and contains a superficies of 2,300 square miles. Malte Brun observes, that if one line be drawn from the Terkiri lake 220 miles N., and another W. of the same 470 miles, we shall find 23 other lakes, which have no outlet, or which flow the one into the other. These masses of stagnant water are the result of the configuration of the Tibetian plateau, which is itself a collection as it were of smaller plateaus, encircled by mountains, or so many concave basins, whose waters, having no outlets, descend to the bottoms of their respective hollows, where they either form lakes, or find them already prepared for the reception of their waters. Fifteen days' journey from Tushooloomboo is a lake 20 miles in circumference, that produces *lincal*, or crude borax, which is formed or deposited in its bed, near the bank; from the deeper parts rock-salt is procured; and during one-half of the year this expanse of saline fluid is covered with a smooth sheet of ice.

Rivers.] Though many of the streams which arise on this most elevated of all terrestrial convexities are lost in the numerous lakes which here and there occupy the hollows of the circular depressions of the mountainous surface, yet several of the longest and largest rivers of the Eastern he-

misphere originate in this region. The edict of the emperor Kaunghee, published in 1721, and given by Klaproth in his memoir on the sources of the Brahmapootra and Irrawaddy, published at Paris in 1828, affords a very curious and particular description of the Tibetian rivers, according to accurate data furnished by the superior Lamas. The origin of the *Whang-ho* is, in this document, said to be without the frontier of Sining. The real name of the incipient stream is *Altun-kol*, or 'Golden river,' as it is denominated by the Mongols. It is about three feet deep, and rises two degrees W. of the Tsing-soo-hai lakes. It has much gold mixed wi[illegible] its sands. The source of this small stream, the commencement of [illegible] Whang-ho, is in 35° N. lat. and 21° W. of Pekin. The tract w[illegible] by its upper course is called *Moma* in Tibetian, and *Thokan* in Chinese. The Whang-ho enters Shinsee, near Hochew, 10 days' journey from its source in direct distance, by a very narrow pass between two vast steep rocks.—The next river of Tibet mentioned by Kaunghee is the *Min-kee-aung*; but it is not a Tibetian but a Chinese river, its course being almost wholly within Sechwen.—The *Yalong-keeaung* forms, for 400 miles in a S.E. course, the S.W. frontier of the Seefaun, and, for 140 more, the western frontier of Sechwen, dividing it from Tibet; and after a course of 160 more, through the S.W. angle of Sechwen, it finally joins the *Kincha-keeaung*, coming N.E. from Yunnan; thus accomplishing a comparative course of 700 British miles, receiving in its broad and deep channel the waters of the Seefaun at the west of Sechwen. From its source to its entrance into Sechwen, in 29° 54′ N., it bears the appellation of the *Sachoo-Tsitsirhana*, and then of the *Yalong*. The *Keeaung-koo*, according to the emperor's memoir, rises in the N.E. of the states of the Dalai lama, and runs S.E. into Tibet, and then enters Sechwen. Farther on, the Keeang passes Kwei-chow-foo, enters Hookwang, waters King-choo-foo, and joins the *Han-keeaung* before Woo-chang-foo.—The *Han-keeaung* comes from the Po-chung-shan mountain—a mountain of Shinsee in the district of Nin-keang-chow, and bears at its source the name of *Shih-yang-shwecy*; it runs to the eastward, and at Nan-ching-hun enters Hookwang, and joins the *Great Keeaung* near Han-yaug-hun: the joint streams are called *Han-keaow*.—In the map of the Lamas, the *Kincha-keeaung* rises in Ngari, or Upper Tibet, (not in the Seefaun,) in 35° N. lat. and 90° 27′ E. long. from a lake called Pahaton Kol. Its name at the source is not given in their map. It runs E. to a place called Hurha, or 'the Custom-house,' where it is joined by a stream from the S. Two degrees E. of its source it receives the *Pitee Muran*, a large stream from the S., and a little beyond, a still larger, called the *Aktam*. In 4½ degrees E. of its source, where it is separated by Mount Koolkoon from the parent stream of the Whang-ho, it turns to the S. and S.E., passing by Cocosay, a custom-house, and Tsitsirkhana, a ruined city, and is called in this part of its course the *Porsic-ho*. In 31° N. lat. it enters the country of Laton, and runs almost due S. till at Tachinquan, in 27° 32′ N. and 16° 40′ W. of Pekin, it enters Yunnan, after a comparative course of 1000 British miles through Tibet; and its course through China is at least double that distance. For volume of water, it is the largest in the Eastern hemisphere, being calculated at 464.400 cubical feet of water, per second of time, discharged into the sea. Including sinuosities, its length, of course, is to that of the Thames as 21½ to 1, or as 3,780 to 180 British miles; and its basin to that of the Thames as 138 to 1, or 760,000 British square miles, as it comprehends all the central part of China and the eastern part of

Tibet, including the Seefaun. The *Lantsan-keeaung* rises in 34° 30′ N. lat. and 22° W. of Pekin, according to the Lama's map, and enters Yunnan under the name of the *Lak-choo*, whence it proceeds to the country of the Northern Laos.—To the W. of this river runs another called *Kara-oossoo*, the modern *Loo-keeaung* of Yunnan; and to the W. of this is the *Longchuen-keeaung*. We cannot say that we are exactly of the same opinion with Klaproth respecting the geographical merits of the edict above referred to. He appears to have got it up mainly for the purpose of contradicting our learned countrymen of Calcutta, and the German journalists of Weimar who have happened to coincide with them in their opinion, that the *Seree Serhit* of the Bor Khampti country is the genuine *Irrawaddy* of Ava; whilst the *Sanpo* of Tibet on the one hand, and the *Nou-keeang* of Yunnan on the other, are both denied to be the Irrawaddy. From modern geographical ignorance of the region between Tibet and Ava, and to the W. and S.W. of Yunnan, it has been found hitherto impossible to delineate the lower courses of the Tibetian rivers W. of the Lantsan-keeaung, and identify them with those streams that intersect the countries of Ava, Pegu, and Siam.

Climate.] In this respect—to reason analogically—Eastern Tibet must bear a great resemblance to Western Tibet; and our actual knowledge of its climate is confined to that part which lies to the S. of the Sanpo. In the temperature of the seasons a remarkable uniformity prevails in Tibet, both in their periodical duration and return. The same division of these takes place as in Bengal. The spring is from March to May, with a variable atmosphere and heat, thunder-storms, and occasional showers. From June to September is the humid season, when heavy and continued rains swell the rivers. From October to March a clear and uniform sky succeeds, seldom obscured by fogs or clouds. For three months of this season a degree of cold, far greater than is known in Europe, prevails. On the southern confines of Tibet its extreme severity has been felt by such as have crossed its mountainous frontier, whether to Tushooloomboo or Lassa. On this rest eternal snows and permanent congelation; and its vicinity is at all times remarkable for the violence and dryness of the winds.

Soil and Productions.] In such a lofty region, and in a climate where the inhabitants are obliged to seek for refuge in the valleys and hollows,—and where, from the glare of light reflected from the snow, they are subjected to ophthalmia and blindness,—we cannot expect much fertility of soil, or abundance of vegetable and farinaceous produce. Yet in some of the valleys grain is abundant; as in that of Jhansee Jeung, where, as Turner passed on his way to Tushooloomboo, abundant crops of ripe corn bordered the road, and numerous clusters of villages on both sides delighted the eye. The autumn being clear and serene, the farmer spreads his corn on the ground to dry, then employs oxen to tread it. If Bootan seems to possess the pabulum of vegetable, in Tibet we find a superabundance of animal life. The variety and quantity of wild fowl, game, and beasts of prey, are astonishing. In Bootan, on the contrary, except domestic animals, nothing of the sort is to be seen. Turner met with no wild animal in Bootan but the monkey, and amid all his travels through it, he saw no game except a few pheasants near Chuka. It is not till near the source of the Patchieu, at the foot of Somoonang, that wild animals begin to appear.

Inhabitants.] Such a large and mountainous region must contain a number of distinct tribes, all classed under the common name of *Tibetians*,

but of which very little is known. Besides these properly so called, as the aborigines of the country, we know but of two other classes, the *Thorpo* and the *Hor*.

The former of these tribes dwell to the N. of this region between the Yarkea Sanpo on the S. and the Cobi on the N., and to the W. of the sources of the Keeang Koo, between the eastern frontier of Khotaun and the tract through which the road passes from Lassa to Sining. They speak a distinct language both from the Kalmucks and the Tibetians. Moorcroft has confounded them with the Eluths who are themselves Kalmucks, though at the same time he distinguishes them from the Hor or Sogpo, who are an Eluth tribe. Klaproth calls them a tribe of Nomadic Toorks, called *Ka-tche* by the Tibetians (or Big mouths) and *Katsi* by the Chinese They are the descendants of the Oigoor tribes, who dwelt in the same tract during the time of the Ywen dynasty in China, and who then bore the name of *Kara Oigoors*, or Black Oigoors. These then are the long-lost and sought-for Oigoors, who made such a figure in the history of Jenghis Khan, and who seemed, from our ignorance, to have vanished quite out of sight, like their ancient neighbours the Hyongnoo. Their country is called *Kara Tibet*, and they are divided into two classes, the Upper and Lower Oigoors. They were subdivided in 1573 by Altun Khagan, one of the Mongolian chiefs, to the N. of the Great Wall, as we are informed by Schmidt, out of the Mongolian history, which calls them Tibetians as well as Oigoors, as being a Tibetian tribe, and also calls them Boodhists, which completely overthrows Klaproth's notion that they are a Turkish tribe and Mohammedans.

The *Hor* are a branch of the Eluth stem, who roam to the N. of the Kara-Noor. Hor, or Hor-pa, is the Tibetian name for the Mongolian race generally, who are called by the appellation of *Gheea Hor*, or Gheea of Hor, or the people of Hor, whilst the name of this tribe in Mongolian is *Siraigol*, or *Karagol*. They are also called by the Tibetians *Sogh-po*, or wanderers, and *Gheea Sogh*, or the people of the prairies, because they wander in the Steppes, In Carey's Tibetian lexicon the names *Hor* and *Sogh-po* are rendered by the word Tartars, and their country, *Sogh-tool*, is rendered Tartary. These Hor or Sogh-po are the Kala Soogpa Tartars of Kirkpatrick, who inhabit the country N. of Joongah, reckoned the highest ground in Tibet.

Besides the Thorpo or Oigoors of the district of Kara Tibet and the Hor or Sogh-po, we know of no other distinct tribes in Tibet, though doubtless there are more, as several languages, or at least dialects, are spoken there. Whether the priesthood are a different stock from the shepherds and goatherds is impossible to determine, but there is ground to suspect so, and that they are of Hindoo origin; that they came from Hindoostan, and imported hither the system of Boodh, and by means of it and their superior learning and science, obtained a complete ascendancy over the simple and ignorant aborigines, who are a poor harmless race, with little else to employ them than the care of their flocks. Mr Manning—who staid long on the frontier with a design of entering the country and of gaining access to Lassa, but who was prevented from obtaining his purpose by the ever-watchful jealousy of the Chinese—found the natives like the Afghauns, strongly marked with Jewish features, and a race totally distinct from the Mongols, Chinese, or Hindoos; and in fact they have a tradition that they came originally hither from the W.

Language and Literature.] Whatever might have been the spoken

language or languages in Tibet previous to the introduction of Boodhism, one thing we are certain of, that no written character or alphabet was used or even known, till that epoch. Although the age of Boodha himself, or the author of the system which bears his name, was at least ten centuries anterior to our æra, yet his system was not introduced into Tibet until a period comparatively modern, although it is impossible to fix the date of its introduction. It is certain, however, that the present Tibetian language and literature are of Hindoo origin. The priesthood—who are possessed of whatever literature exists in Tibet—point to Benares as the source whence all their learning has been derived. It appears that the Tibetians received both their alphabetical characters from Hindoostan about the middle of the 7th century. Mr Moorcroft, in a written communication from Cashmere, in 1823, to the Asiatic Society of Calcutta, has given a sketch of the language of Tibet, illustrated by drawings of the various alphabets used there. According to this account, not less than 10 varieties of character are employed in that country for familiar and religious purposes.

Commerce and Manufactures.] Excepting the manufacture of idols, we know almost nothing of Tibetian commerce or manufactures; but we may presume that they have a considerable commerce with China. Formerly a considerable commerce was carried on with Bengal through Nepaul, but since 1792 this has been totally stopped by the timid jealousy of the celestial court. No money is coined in Tibet, being forbidden by the principles of their religion, and a very adulterated coin is the common medium of exchange

Religion.] Tibet is the chief seat of Boodhism and of its incarnated head. The influence of this spiritual lord extends over the whole of Central Asia, and he formerly united in his own person the regal as well as the sacerdotal character. The latter he still preserves in its fullest extent, in his own name and by means of spiritual vicars, who reside in different parts of his vast spiritual domain; but his regal power has of late been exercised by the emperor of China, who acts in his name, and has got military possession of all Tibet under the covert of pious protection, especially since Teeshooloomboo was plundered by the Nepaulese, which rendered the political intervention of China necessary to protect a spiritual potentate who could not defend his own territories. According to such Tibetian accounts as Turner could collect, Kanka Grinbo was the first lama who pretended to the sacred character of an incarnated deity, (or rather of Boodha,) and the emperor of China, convinced of the truth of his pretensions, conferred on him the regal and sacerdotal functions in the year 1100.

Government.] The administration of affairs is managed by four ghylongs, each of whom has the administration of one-fourth of Tibet. Under these the civil and military affairs are conducted by the respectable Chinese who dwell at Lassa, and whose nomination must be approved by the Dalai lama. They are generally chosen from amongst the wealthy families, and distinguish themselves as much by their intellectual capacity as by their irreproachable conduct. The Tibetian army is composed, according to father Hyacinth's Chinese author, of 60,000 men, of whom 15,000 are cavalry. The levy is said to be made with great impartiality, one man out of 10 is ordinarily taken. This, if correct, would give 600,000 men fit to bear arms; and this, if reckoned one-fourth of the population, would give 2,400,000 as the population of Tibet; but to this must be added all those who belong to the religious orders, whether male or female, so that the population may perhaps amount to 3,000,000.

Manners and Customs.] Of these very little is known. As might be expected in so cold a climate, the Tibetians use very warm clothing, such as we have already described in our account of Western Tibet. The houses of the peasantry are meanly constructed, and resemble brick-kilns, being built of rough stones heaped on each other, with a few apertures to admit light, and a flat terrace for the roof, surrounded with a small parapet. In their food the Tibetians uniformly prefer crude undressed meat, of which kind mutton is almost solely used, and at their feasts the table is seen spread with joints of raw fresh mutton as well as boiled, the former being most esteemed. They have no occasion to salt their meat during winter, as it will remain fresh during the whole season, from the coldness and dryness of the air. Tea is a favourite beverage amongst them. The milk of the yak is much used as food, and is a great article of commerce. This most useful animal gives abundance of this lacteal fluid, rich, and yielding most excellent butter, which is easily preserved in skins or bladders excluding the air. It keeps in this cool dry climate during all the year, so that after some time tending their flocks, when a sufficient stock is accumulated, they have only to load the yaks and drive them to a proper market, with their own produce, which constitutes, to the utmost verge of Tartary, a most material article of merchandize. These animals serve the Tibetians for riding, clothing, and food ; and their fine soft silky bushy tails serve as ornaments both to the peasant and the prince. The Tibetians are said to be polyandrists ; one woman having several husbands. The eldest brother of the family is said to have the privilege of choosing his wife, but she becomes the common property of all the brothers, however numerous. We greatly doubt, however, the truth of this. As to the rites of burial, we have different accounts. Some are burned, others buried, others thrown into a river, others taken and bruised to pieces, bones and all, and formed into balls, which are given to be devoured by a species of kites, which are esteemed sacred. But the general mode of disposing of the dead is like that of the Parsees of Bombay : they are exposed in the open air, and left to be devoured by carnivorous birds. A place set apart for this purpose was seen by Turner and his suite, when descending the mountain Soomoonong into the plain of Pharee. But a fate far different is reserved for the body of the sovereign lamas, the Dalai lama, and the Teeshoo lama. Soon as the soul of Boodha or Sacyo-Moonee has left the body, the latter is placed upright in an attitude of devotion, the legs being folded under him, with each thigh resting on the instep, and the soles of the feet turned upwards ; in this posture they are deposited in shrines. The inferior lamas have their remains usually burned, and their ashes deposited in small metallic idols. Over the shrines of the deceased sovereign lamas, splendid pyramidal mausoleums are built. The Tibetians, as might be expected in so mountainous and so secluded a country, and immersed as they are in all the monstrosities of Lamaism, are very superstitious. Every hill, cave, mountain, or inaccessible place, every glen and stream, is the habitation of spirits and supernatural beings. Every village has its dæmon, or protecting genius, to whom respect is paid, either from fear or gratitude. Spirits, ghosts, and other imaginary objects of terror, are quite common in vulgar belief. But sunk as the Tibetians are in the most abject subjection to the lamas and monks, they are comparatively an amiable, mild, humane race, and quite free from many of the cruel and sanguinary customs of the Hindoos. There is no selling of female infants, as in Bischur and Sirinagur ; no putting them to death as among the Rajpoots ; no ex-

posure of children on trees, or on the banks of the Ganges; nor drowning them in the sacred stream to propitiate an offended deity; nor funeral piles whereon widows are burnt to accompany the manes of their deceased husbands. In Tibet it must be said that the system of Boodha exercises a more benignant sway than the cruel multifarious system of Brahma, and the obscene sanguinary rites of Juggernaut.

Cities.] The greater number of places marked on the map of Tibet as given by the lamas, seem, as Malte Brun very justly remarks, to be nothing more than villages, or groups of cabins, each surrounding some temple. According to the Dai-Syn-itoundchi, there are but 16 cities in all Tibet. Of these *Lassa* and *Teeshooloomboo* only deserve notice. *Lassa*, called *Khlassa* by the Tibetians, is seated on the Kaltjoo Mooren, a tributary of the Sanpo, and 24 miles N.E. of the chain bridge across that stream, in a spacious plain. It is a small city, says Malte Brun, but the houses are built of stone, very spacious and very lofty. It is represented by others as a large city, and the Chinese officer, whose account has been given by Hyacinth, affirms that the vast palace, the streets, and bazaars, are worthy to fix the attention. This city was encompassed with a wall, but the chief military governor of the west having demolished it, rebuilt it anew, and had it excellently constructed of granite, and surrounded by a strong stone mole 30 li in length, and which encloses all the sacred space, and defends it against the inundations of the river. It is the seat of the Tibetian government, and of the Chinese mandarins appointed to act as overseers. It is inhabited by merchants and artisans. The famous mountain 7 miles S.E. of the city, on which is the palace of the great lama, is called *Putala*, or the Holy Mountain; but according to the Chinese, this is only the name of the palace, whilst the mountain is called *Mar-Buli*, or *Pamuri*. This palace or temple is crowned with a gilt dome 62 Chinese fathoms high. If each of these be 10 feet, as the Jesuits tell us, the elevation must be enormous, amounting to 620 feet. The exterior is said to be adorned with numberless pyramids of gold and silver, and the 10,000 rooms (a Chinese hyperbole) of the interior contain an immense number of idols of the same precious metals. During the first month of every year, all the lamas from every part of Tibet assemble in this temple to perform their religious service. The Chinese keep a strong garrison in Lassa, commanded by an officer called Zewan Norba, or chief of the army of the west.—*Teeshooloomboo* is the seat of Pantschin, or Bantschan Rimbochay, the second great lama. It is a monastery, containing 300 or 400 houses, inhabited by monks, besides temples, mausoleums, and the palace of the sacred personage. Of this place we have an excellent account from Turner, who visited it in 1783. The buildings are all of stone, with flat roofs, and parapets of heath, and small boughs. It is defended at a small distance by the fortress of Sheegatchee-Jeung, seated on the prominence of a lofty rock. The plain of Teeshooloomboo is perfectly level, and everywhere surrounded by rocky hills. Its direction is N. and S. about 15 miles, and from E. to W. about 5 miles. The rock on which is seated the monastery is the loftiest in all the vicinity, and commands an extensive view, and the Sanpo is visible to the N. flowing in a widely extended bed, containing many islands, but the principal channel is narrow, deep, and rapid. At a distance, Teeshooloomboo has a grand appearance. If its magnificence, says Turner, could be increased by any external cause, none could more superbly have adorned its numerous gilded canopies and turrets, than the sun rising in full splendour

directly opposite. It presented a view wonderfully beautiful and brilliant, the effect was little short of magic, and it made an impression never to be erased from my mind.

Historical Notice.] Like many other pagan countries of Asia, Hindostan not excepted, Tibet has no historical annals, at least none have yet appeared. We only know its history by its connection with and vicinity to China. Beyond 790 of the Christian era, we have nothing but tradition, a most uncertain and precarious guide. According to it, Tibet was peopled 1340 years before Christ, by Prasinpo and Prasrimno; 300 years later, Boodha or Sacyo, was born of a virgin, having descended from the skies to restore a purer system of faith. The first king of Tibet was Guiathritz Bengo, son of Macchiaba, a Hindoo sovereign. His capital was Jarlon, and he died 1102 years before our era. The people, weary of anarchy, voluntarily submitted to China in 790, A.D. It is from this period that some light begins to dawn on Tibetian history. From the Chinese writers we learn that the Tibetians were a powerful people in the 8th century, and possessed of all the country from the sources of the Sanpo to the mountains of Cashmere, and the frontiers of Tokharestaun to the W. of the Beloor.

TANGOOT OR SEEFAUN.

This is a large and extensive region, comprehending all the space between Tibet, China, and the Kobi, or Great Sandy Desert. Under the above appellation—the one Mongolian, signifying the western country, the other Chinese, signifying the people of the west,—all the country to the W. of China was understood, even including Tibet; hence the language and characters of Tibet were called *Tangootan* by the Mongols and Western Mohammedan writers. *Seefaun* signifies 'the Western people' in Chinese, and not Eastern Tibet, as Klaproth affirms, in the same way as the Kokonoor is called *See-Hay*, 'the Western sea,' and the region to the W. of the Whang-Ho, *Ho-See-oo*, or the country to the W. of the Ho or river. In a similar way Tangoot was called by the Chinese, *See-Heea*, or Heea of the W., because the princes of that dynasty had the charge of the western frontier, at the extremity of the Great wall. The appellation, *See-Faun*, was subsequently merged in that of *See-Heea*, when that dynasty rose on the ruins of the former; and in that of *Tangoot*, when the Mongolian dynasty commenced under Jenghis Khan, which overthrew that of the See-Heea in 1227. All these terms, therefore, are merely relative, not taken from the people who inhabited this extensive region, or the princes who ruled it, but from its relative situation to China; and it must be observed, that it is only from the Chinese that we have any account of this region; the western writers who knew it under the Mongolian appellation of Tangoot, were acquainted only with the N.W. part of this region, but of the southern part, strictly so called, and in modern geography denominated the country of the See-Faun, they knew nothing, nor of the history of the princes who ruled it antecedently to the rise of the Heea dynasty. At the epoch of Jenghis Khan, Heea or Tangoot comprehended all the country of the Seefaun to the E. of the Yalong, the country of Kokonoor, the district of Shachew, all the N. and N.W. part of Shensee, and the countries of the Ortoos Mongols, and Etsine, as far N.W. as the frontiers of Hamee. This was the Tangoot of the western historians, and of Marco Polo. The names of See-Heea and Tangoot have long since become obsolete; but the appellation of Seefaun, in its present restricted sense, still remains.

Therefore, under the name of Tangoot, or the country to the W. of China, as distinct from Tibet, we comprehend the three following countries, the Seefaun or Too-faun, the country of the Eluths of Kokonor, and the district of Sha-chew.

I. SEEFAUN OR TOOFAUN.

THIS region was once the seat of a powerful dynasty formidable to its neighbours, and even to the emperors of China. On the east, it not only included several districts, now belonging to Shensee and Sechwen, but its chiefs extended their conquests so far within them, as to subdue several cities of the second rank whereof they formed governments. Westwards it included all the country to the W. of the Yalong-Kecang to the frontiers of Cashmire, as we are told by the Chinese historians and geographers of the middle ages. It consequently included all Tibet according to them. When or where this dynasty commenced, and the name or site of their capital, the Chinese authors have not informed us, but merely state that in the 7th century, Ki-tsong, king of the Seefaun, possessed all this vast dominion, had several kings who paid him tribute, and from him received their investiture with patents, and seals of gold, and also that he compelled the emperor Taytsong, the most powerful prince of the Tang dynasty, to give his daughter in marriage to his son in 640. His successors were so powerful as even to defeat the Imperial armies, and capture Singan-Foo in Shensee, the capital of the empire, in 772. But the history of this state is involved in darkness, and its geography obscure; and Remusat, who has taken great pains to illustrate the Chinese geography of their empire, especially during the dynasty of Tang, has thrown no light whatever on the subject of the See-Faun, but merely tells us that the Thang-hiang, or Tangootians, founded an empire in the 10th century, and passes over in total silence the dynasty of the Seefaun princes. We can only say, therefore, that the empire of the Seefaun went to pieces in the middle of the 9th century, from dissensions amongst the members of the reigning family, several of whom submitted to China, others fortified themselves in the mountains, and others remained independent under a petty prince of the blood in the vicinity of Sining, in Shensee. But in the 10th century, all the tribes and petty princes of the Seefaun became subject to the Heea dynasty, and the family of Tonshen, descendants of Panlochi, chief of Luka-Marsining, enjoyed their small principality in peace under the protection of the Heea princes, till they were involved in the common ruin of that dynasty by the conquering arm of the Mongolian hero, Jenghis Khan, since which event the Seefaun have remained in their original country without either name or power.

In the Jesuits' map of Tibet, sheet first, the territories of the Seefaun are distinctly delineated as bounded on the east by the province of Sechwen, on the north by the chain of the Nomkoun Oubashee, which divides it from the upper basin of the Whangho, and on the west by the Sachoo Tsitsirhana river, which forms its boundary on the side of Tibet. According to this map, therefore, the country of the Seefaun lies between 29° 54′ N. lat. and 33° 30′ N. lat., and between 12° 30′, and 19° W. of Peking, at the source of the Sachoo. Its shape is triangular, the base formed by the Nomkoun Oubashee on the N., being about 360 British miles long, and the other two sides, which meet in a point in 29° 51′ N., 300 British miles each, but the western side is somewhat longer than the eastern. The region now delineated, was once well-peopled, had many cities, towns,

and villages, and fortresses; but not one town exists at present of all the above, and the nation of the Seefaun is now reduced to a nomadic state. They are divided by the Chinese writers into two classes: the *He-Seefaun*, or White Seefaun, and the *Whang-Seefaun*, or Yellow Seefaun. These denominations are not given them because they live on the banks of the Kara Mooran, or Whangho or the Black river, and the Yangtse Keeang or Yellow river, as Malte Brun erroneously says, nor from their complexion, which in both tribes is swarthy, but from the colour of their tents. In this instance, Malte Brun has committed two mistakes, in calling the Yangtse Keeang, the Yellow river, whereas it signifies the river, Son of the Sea, and which appellation is only given to the Keeang in the lower part of its course, whereas its true name is the Keeang-Koo, or Blue river; and secondly, in saying that the Yellow Seefauns dwell on the Yangtse Keeang, he confounds it with the Min Keeang, a mere tributary of the Great Keeang, and which originates in this region under the name of the Heshwee Ho. The Black Seefauns, besides tents, have also houses, and are governed by two chiefs, who depend on a third, but are very uncivilized. Those seen by Father Regis, were dressed like the inhabitants of Hamee, or Khamil, in the eastern extremity of Chinese Toorkistaun The women wear their hair parted into tresses, hanging down their shoulders, and full of little glass mirrors. The Yellow Seefaun are subject to certain families, whereof the eldest is made a lama, and wears a yellow habit. These lamas are all of the same family, and govern in their respective districts. They have the power of deciding causes and punishing criminals. They inhabit the same canton, but in separate bodies, without forming large families of the same kindred, which seem like so many camps. The greater part of them dwell in tents, but some have their houses built of earth, and a few with bricks. They want none of the necessaries of life, and have numerous flocks of sheep. Their horses though small, are well shaped, strong, and full of fire. The lamas who govern these people, do not vex or oppress them, provided they render them due honours, and punctually pay the duties of Fo, (Boodha) which are very trifling. These seem to be a sort of tithes exacted on a religious account. Boodhism has ever been the religion of the Seefaun, who always chose their lamas to be their ministers of state, and sometimes to command their armies. The black and yellow Seefaun are said to speak different dialects of one language, but they understand each other well enough for the purpose of mutual commerce. The books and characters used by the lamas and chiefs are those of Tibet. Though bordering on the Chinese, their manners and customs are very different. In some customs they resemble the Kalkhas, and the Eluths of Kokonor. Both the black and yellow Seefaun are nearly independent of the neighbouring mandarins, who dare not treat them with rigour or force obedience; their frightful mountains which they inhabit, and whose summits are covered with snow even in the month of July, secure them against all pursuit. They have abundance of gold which their rivers bring down from the mountains, which they well know how to collect and work, for of it they make vessels and small statues of Boodha. The use of this metal is very ancient amongst them, as we are told that a certain emperor of the Han dynasty, having sent a deputation to certain Seefaun chiefs who had made a foray into the Chinese borders, these chiefs endeavoured to pacify him by a present of gold plate. But the officer who headed the deputation refused it, telling them that rice in dishes of gold did not relish with him. It is impossible to determine from Du Halde whether

the Seefaun belong to the Mongolian or Tibetian race; and his account of the geographical site of the Seefaun is confused and inconsistent, for whilst the first sheet of the map of Tibet exhibits the country of the Seefaun very distinctly, yet his account seems to place them to the N. of W. and N. of the Whang-Ho, and according to him the borough of Topa, 4 leagues N.W. of Sining, in Shensee, is the property of, and subject to, a lama of the yellow Seefaun. We much doubt that the indefinite appellation *Sefaun*; 'people of the west,' has led to some confusion on this head, and that a number of different nomadic tribes who roam on the W.N.W. and S.W. of China have been confounded with each other, by means of this Chinese appellation. The subject is obscure and likely to remain so.

II. THE ELUTHS OF KOKONOOR.

THESE are the *Koscioth*, or *Koshotee* Eluths, a branch of the great Kalmuck stem, consisting of the four tribes of the *Torgoots*, the *Soongars*, the *Derbets*, and the *Koshotes*. These last are said to amount to 50,000 families, and roam in the vicinity of the Kokonoor, or 'blue lake.' The country in which they roam lies to the N. of the Seefaun country described before, to the W. of Shensee, to the N.E. of Tibet; and on the other sides is bounded by the Kobi, or 'Great Sandy desert.' We have a most confused and inaccurate account of this region in Du Halde; for, after having described the country of the Seefaun, he next describes that of the Tartars of Kokonoor, which is made to contain, in one place, all the country W. of China, extending from the Kobi to the frontiers of Yunnan and Ava —thus including, not only the Seefaun before described, but also the tracts watered by the Yalong, Kinsha, Lantsang, and Noo-Keeang rivers, down to 25° 33′ N. lat., and in another place it is made to extend 7 degrees of lat., namely, from the above southern lat. to 33° N., which totally excludes the country of Kokonoor which lies N. of that lat., and includes the Seefaun he had already described. In this blunder he is followed by the learned authors of the Modern Universal History, although that description be quite inconsistent with their geographical account of the Seefaun, in the 7th volume of that learned and laborious work. Were it not for the Jesuits' maps accompanying Du Halde's performance, we would be lost in a mass of confusion, so discordant are his materials; and even in the large map of Sechwen, the country which, in the first sheet of Tibet, is properly called the country of the Seefaun, is there called Kokonoor. Malte Brun, who has a rare knack of avoiding difficulties, or wrapping himself up very conveniently in the cloak of generalities, tells us that the Chinese call the Koshotee Eluths, Seefauns. It can be only so because they lie W. of China; and since the term is altogether relative, it would be better, to avoid confusion, to divide the people to the W. of China into Northern and Southern Seefaun, in respect of their relative situation to each other, as well as their relative situation to China. In this way, the Seefaun to the S. of the Nomkoun Oubashee would be the Southern Seefaun W. of Sechwen, and the Koshotee Eluths to the N. of the same dividing range, the Northern Seefaun to the W. of Shensee; understanding, at the same time, that these are different people from each other, though still equally western in respect of China. The Southern or Proper Seefaun, as distinguished from the Koshotes, would still retain their place, as laid down in the first sheet of the map of Tibet; whilst the Northern Seefaun would correspond to the country of Kokonoor, as laid down in the 4th sheet of the map of Tibet. This region is very

mountainous throughout, and towards the source of the Whangho, and alongst its upper course, is called *Moma* and *Thokan*. On the E. it is parted from Shensee by lofty mountains, particularly those called Swee-Shan, or 'the snowy mountains,' extending N.E. of Sining, to Lyang-chew, and N.W. from it to Hya-yu-quan. It abounds with rivers and lakes, all the former, with a few exceptions, falling into the Whangho. The latter are very numerous, most of them having no outlets. Of these, that called Kokonoor, or 'the Blue Lake,' in Mongolian, and Zin-chay and See-hay, or 'the western sea,' in Chinese. It is more than 70 British miles long by half that in breadth, in a very elevated site, surrounded by mountains, and containing an area of 1,840 geographical square miles. It lies immediately to the W. of Sining-chew, in Shensee, between 36° and 37° N. lat. and its western extremity is 17° W. of Pekin. We have no particular account of its productions, whether animal, mineral, or vegetative, but, to judge from analogy, they must be much the same as those of Tibet. We know that the musk-deer and the yak abound in this region—animals which cannot exist but in cold mountainous regions. As the sources of the Whangho lie on the very frontier of this region, we are certain that gold is a native production of the mountains whence they flow. But it is most famed for its rhubarb, the best in the world, which is produced in the Swe-shan, or 'snowy mountains,' in the vicinity of Sining, and Soo-chew, the Succur of Marco Polo. It grows in the clefts of rocks, in dry and arid situations; the roots are pulled up in April and May, and then hung on the trees to dry. There are no towns in this region, as it is merely a pastoral region for wandering Tartars, who dwell in tents, but never build cities. The Koshotee Kalmucks are divided into eight tribes, under as many taidshas or chiefs, all of whom submitted to China after the defeat and death of Kaldan Pojukhtee, Khan Taidsha, or supreme prince of the Soongaree Eluths. The chief taidsha received the title of Wang, or 'Head Regulo' of all the Koshotes, whilst the others received subordinate honours from the court of Pekin. They are all staunch Boodhists, devoted to the interest of the Tibetian Lama, whose protectors they were, till deprived of that honour by the celebrated Kaldan. In every point of religion, mode of life, manners and customs, they so much resemble their pastoral brethren of the Mongolian, that there is no necessity of retailing what has been said on that head before, and we shall therefore conclude with a very short view of the political history of this region. It was not till some time after the extinction of the Seefaun monarchy that this country made any political figure. By the assistance of several petty Seefaun tribes, Likitsyin, a native of Topa, a considerable city W. of Sining, was enabled to found a new dominion near the Whang-Ho in 951, the capital of which was Ning-Heea, whence the kingdom took its name of *Heea*, and *See-Heea*, or the 'Western guards,' and which was denominated *Tangoot*, or the 'Western kingdom,' by the Mongols, because it lay to the W.; and hence the name Tangoot passed to the Mussulman historians of the W. Its capital *Ning-Heea* is the *Campion* or *Campetion* of Marco Polo. This dynasty gradually enlarged its dominions at the expense of the Kin emperors of Northern China, till it rose to be a powerful and respectable monarchy; and a prince of this dynasty, Yuan Chao, received the title of emperor from the Kin sovereign. This same prince introduced the Indian writing (the letters and language of Tibet, originally from India, as before stated) amongst his subjects, after making some alterations in the mode of writing the characters. The time when this prince reigned is not told us

by the Chinese; and although this dynasty lasted 276 years, from 951 to 1227, and must have contained 12 successive sovereigns at least, supposing their average reigns to have been 23 years, which is even too much, yet the Chinese annals mention only four princes, the first, Likitsyen, and the three last, who reigned from 1205 to 1227, and who are merely mentioned because they were contemporaneous with Jenghis Khan; and Lite, the last of these three, was put to death by that conqueror, and both kingdom and dynasty for ever extinguished, and the very name of Tangoot blotted from the political map. The western historians never heard of this kingdom till it was overturned, and its last sovereign is the only one mentioned by them, under the name of Shidaskou. This is all we learn of the powerful empire of Tangoot, so much spoken of by the writers of the 13th century, from the meagre, dry, and brief annals of the Chinese.

III. DISTRICT OF SHACHEW.

To the W.N.W. of Hya-yu-quan, the most N.W. gate of the great wall, lies the district of Shachew, projecting W. into the Kobi, or Great Sandy Desert, and surrounded by it on all sides, but where it is connected with Kansoo, or the N.W. of Shensee, by passes accross the mountains, and by a chain of small forts. The district itself is a long narrow valley, extending for about 200 miles W.N.W. of Hy-yu-quan, chiefly watered by the small stream of the Polonkir Pira, which falls into the Hara Noor or 'black lake;' long. 22° W. of Peking. This district contains the fortified cities of Shachew, Quachew, Gansechew, Chontori, and others, and was merely reserved as an advanced line of military stations towards the Kobi and province of Hami, to secure the empire against the Hyong-noo, and their successors, the western Tartars. This district was first united to the Chinese frontiers by the emperor Vootee, about a century before the Christian era. It was after the expedition of Ho-khiuping, in the reign of that emperor, that the Chinese frontiers were, for the first time, carried so far west as the district of Souchew, which, in the ancient Chinese books was known by the appellation of Tsieou-Tsiouan, or 'the fountain of wine.' The country so conquered was peopled speedily by Chinese colonists, and divided into 4 *kiun* or territories, Wow-wei, Tchang-ye, Thunhoang or Shachew, and Sou-chew. These establishments were destined to protect the passes of Yangkouan and Iumen to the E. of Shachew, and which lead over the Swee-Shan, or 'snowy mountains' into Shensee. Ever since that period, the district of Shachew, the most advanced of the three, which are on the line of the Great wall, has always been retained as an advanced post by the Chinese court, except when, through the imbecility of the government, it was unable to retain it. It was sometimes even proposed, in the Chinese cabinet, to abandon this district, as difficult to maintain from its great distance, and its being always exposed to the attacks of the Tartars. But it was always overruled in the council, as being considered not only a protection to the two passes above mentioned, but also as it prevented, by its situation, the union of the Tartars with the Kiang or Tibetians to the S., which might prove fatal to the empire. It was therefore retained as a strong garrison, and the idea of abandoning it, and withdrawing the garrison to Lyanchew, was given up. When the kingdom of Tangoot rose in the 10th century, this district, and all western Shensee, fell under its power. It then passed under the Mongolian dominion with the other provinces of Tangoot, and remained so, till it was retaken by Hong-voo in 1370, and refortified by

Yongloo, his son. The city of *Shachew* lies in 20° 40′ W. of Pekin, and 40° 20′ N. lat., 180 British miles direct distance from the N.W. entrance of the Great Wall at Hy-yu-quan. We have no description of it but what has been given by the ambassadors of Sharok Meerza in 1420. When that vigorous emperor, Yongloo, filled the throne, Shachew, according to this account, was 25 days' journey from Hami, and for the last 10 days' journey, it was a perfect desert to Shachew, without wood or water. Shachew, says the writer of the account, is a very extensive city, built in a square form, and surrounded by a very lofty wall. The streets of the bazaars are 50 guz (100 feet) wide, full of ingenious artizans, and regularly swept and watered. The streets are all drawn in a straight line, and intersected at right angles by others. Each street is terminated at both extremities by wooden cupolas of singular elegance, having projecting beams richly ornamented. At equidistances on the wall are placed covered bastions; the four city gates front each other, and although the intervening distance be immense, yet, from the straightness of the streets, and the multitude of passengers, it appears inconsiderable; a tower of two stories surmounts each gateway. The number of temples (of Boodha) is prodigious, with spacious courts, paved with brick, and covered with carpets; young men are placed at the door, who give admittance with acclammations of joy. From Shachew to Khanbalic (Peking), the residence of the emperor, are 99 yam or towers, adjacent to so many towns, and between each of these are so many surghu, which are towers 60 guz (120 feet) in height, where ten sentinels constantly watch. Each surghu is situated so as to be in sight of another; and if any accident occur, such as the invasion of an enemy, the sentinels kindle a great fire; the same is done instantly by the next, until the news be carried to court. Intelligence may thus be conveyed in 24 hours from a place three months' journey distant from the capital. Such is the account of Shachew, and it is valuable when we have no other. It is stated to be nine yam or stations distant from *Cam-chew*, a still larger city than it; the same with the modern *Kan-chew*, capital of Kansoo, or Western Shensee. *Qua-chew*, another place of importance, lies in 40° 35′ N. and 20° 8′ W. of Pekin, and is strongly fortified. Of the other places in this district we have merely the names, and can say nothing about them.

Thus we have finished our account of Central Asia. It is very imperfect, indeed, from the want of materials, and there is little appearance that our knowledge of it will be increased for a long time to come; and the curious public must just rest satisfied with what meagre accounts they possess, till some revolution, political or moral, open up the way for the future investigation of this extensive and almost unknown region.

THE ASIATIC ISLANDS.

CHAP. I.—THE JAPANESE ISLANDS.

THE empire of Japan, called by the natives *Hifon*, or *Nifon*, and by the Chinese *Yang-hoo*, consists of a great number of islands united under one government. It is comprehended between 26° 35′ and 49° N. lat., that is, from the southern extremity of the archipelago of Moninsima to the middle of the island of Saghalian; and from the Gotto islands, to the N.E. point of the isle of Itouroup. Within these limits we find the following large and small islands: viz.

1*st*, The island of *Hifon*, or *Nifon*, with the dependent islands of *Sado*, *Oki*, *Awasi*, and *Fatsisio*, presenting a total superficies, according to Hassel, of 110,768 square miles.

2*d*. The island of *Kiusiu*, or *Ximo*, with its dependencies of *Firando*, *Tsoosima*, and other islets, the total superficies of which is estimated at 28,552 square miles.

3*d*, The island of *Sicoco*, or *Xicoco*, or *Sikokf*, with a superficies of 17,372 square miles.

4*th*, The island of *Jesso*, with *Koonaschir*, *Tschikotan*, *Uroup*, and *Itouroup*, or the *Japanese Kuriles*, as they are sometimes called, the total superficial area of which is 63,446 square miles.

5*th*, The island of *Saghalian*, or *Karafta*, with a superficies of 48,246 square miles.

6*th*, The *Bonin* group, with a total superficies of 1827 square miles.

From the above admeasurements of Hassel, it would appear that this vast insular empire of Eastern Asia possesses a superficies of 270,211 square miles. Its component islands are arranged in a long-curved chain, running from S.W. to N.E., with the convexity towards the S.E. This chain is terminated on one hand by the southern point of Kiusiu, and on the other by the island of Itouroup, or by that of Saghalian. The sea of Japan washes this monarchy on the N.W.; the strait of Corea separates it from the peninsula of that name on the S.W.; and the strait of Vries, on the N.E., divides the Japanese and Russian Kuriles from each other.

Historical Notice.] The existence of these islands was first announced to Europeans by the celebrated Venetian traveller, Marco Polo, who denominated them the country of *Zipangri* or *Zipangu*. In 1542 or 1543, the Portuguese adventurer, Fernando Mendez Pinto, was shipwrecked upon this coast; and his countrymen, availing themselves of his intelligence, sent a commercial expedition to them shortly afterwards. The expedition established itself at Nasagaki, and for several years conducted a considerable trade with the natives. In 1585, a missionary deputation was sent from Rome to this country, and to its members we are indebted for the first distinct accounts of Japan. The Dutch succeeded the Portuguese in the Japan trade, and are now the only European nation who enjoy this privilege. The Russians have made several attempts to share it with them; but have hitherto been unsuccessful. Although it is expressly forbidden by the ex-

isting laws to record the annals of the dominant line of monarchy in this country, yet the Japanese are said to possess historical documents of unquestionable authenticity, extending over a period which commences several centuries antecedent to the Christian era. This history, however, is to us unknown. It is said that the indigenous Japanese were early subjugated by a tribe of Mongols or Mantchoos, who adopted the language of the conquered. The sacred era of the Japanese goes back to the establishment of the hereditary succession of the *dairis* or ecclesiastical emperors, which was 660 years before the Christian era. This dynasty retained its power till the year 1585 of our vulgar era. In this interval two invasions had been repelled: that of the Mantchoos in 799, the accounts of which are accompanied with many fables. In 1281, the Mongols, under Koobly Khan, having conquered China two years before, attempted to take possession of Japan. The learned Amiot has given us, in a work translated from the Chinese, the history of that expedition according to the Chinese authors. In this history the Chinese army, joined to that of the Coreans, amounted to 100,000. The Coreans furnished 900 ships of war: but this great armada was dispersed in a dreadful storm, an event which the Japanese attributed to the protecting care of their gods. All the acquisitions which the population of Japan is known to have received from the continent of Asia are confined to some colonies of Chinese and Corean emigrants.

Physical Features.] The general aspect of these islands is rugged and irregular, bristled with rocks, hills, and lofty mountains. Here and there narrow valleys of great fertility present themselves; but there are many extensive tracts naturally barren, and which are only compelled to yield the means of subsistence by the most unremitting industry. No precise estimate seems to have been formed of any of the mountain-peaks, except what may be inferred from *Fusi*, or *Fusiyama*, on the southern coast of Nifon, the most lofty of these peaks being covered with perpetual snow. Several of them are volcanic, and they almost every where abound with mineral springs. Earthquakes have very frequently been felt in these islands. In 1703, the greater part of the city of Jedo, with a vast number of its inhabitants, were swallowed up by one of them. The rivers are numerous, but do not seem to be of great magnitude, considering the extent of the land. They generally rise in the mountains which occupy the interior. The courses of only a few of them are known to Europeans. The names of the principal rivers are the *Jedogawa*,[1] *Ojingawa*, and *Fusigawa*, all situated in the southern part of Nifon, the *Tenrin*, which falls into the bay of Owari, the *Banninjava*, falling into the bay of Jeddo, the *Sakgawa*, *Jodo*, *Ojin*, *Oomi*, and *Aska*. The principal lake in the Japanese islands, and the only large one known to Europeans, is the lake of *Oiz*, between Osaka and Meaco, which is said to be 50 Japanese leagues in length, each league being as much as a horse goes in an hour at an ordinary pace. The delightful plain which surrounds it is rendered sacred by containing 3000 pagodas.

Climate.] Japan is exposed to the extremes of heat in summer, and of cold in winter. The weather is at all times changeable; and, about midsummer, they have periodical rains. Thunder is frequent, with tempests and hurricanes. Thunberg found the greatest degree of heat at Nagasaki to amount to $29^{\circ}\frac{1}{3}$, and the greatest cold to 10° of Reaumur. The climate is most severe in the islands of Yesso, Saghalian, and the Kuriles.

[1] The word *gawa*, or *gava*, seems to signify 'river' in the Japanese language, as it does in the Celtic.

Soil and Cultivation.] The soil of Japan is not naturally fertile, but has been rendered very productive by the industry of its inhabitants. The Japanese equal the Chinese in the labours of cultivation; and the modes adopted are generally similar in both countries. As in China, little ground is appropriated to the rearing of cattle; the same scarcity of manure exists; the same solicitude is exhibited to procure it, and it is applied in a similar manner. Every spot of ground is made productive; and the terraced mountains exhibit an astonishing proof of what can be effected by human ingenuity and perseverance when prompted by necessity. The general crop is rice. Wheat is little used; but buck-wheat, rye, sesame, and barley, are frequently reared. Beans, pease, cabbages, turnips, and a species of potatoes, are plentiful. Among the produce of Japan may be mentioned the cotton-shrub, and the mulberry-tree, camphor-laurel, and the varnish-tree. Wheat and barley are sown in the beginning of winter, and are reaped in June; rice is sown in April, and is ripe in November. The progress of cultivation has left few forests, except upon the mountains. The larger trees consist of pines, willows, laurels, palms, cocoas, cycas, mimosas, cypresses, and bamboos. The plants of Japan very much resemble those of China. The tea-shrub grows without culture in the hedges; and ginger, black pepper, sugar, and indigo, are cultivated with great success. Besides the sweet China orange, there is a wild species peculiar to Japan, the *Citrus Japonica.*

Animals.] The cattle in Japan are still fewer in number than those in China. Of sheep and goats there are none except at Nagasaki: the fleeces of the former being superseded by the abundance of cotton, and the latter being esteemed enemies of cultivation. For the same reason there are only a few swine, and these are almost confined to the island of Kiusiu. The horses are a small but agile breed. Thunberg compares the number of horses in the whole empire to those of a single Swedish province. Cattle are reared solely for the purposes of ploughing and drawing carts: the Japanese never use either their flesh or their milk. The animal food made use of consists of fish and fowl, but vegetables are more generally eaten. Dogs, though not necessary for the guarding of cattle, are kept through peculiar notions of superstition. The wolf and the fox are found chiefly in the northern provinces; the latter is much dreaded, being, by the common people, supposed to be possessed by an evil spirit. Game is not plentiful: there are wild geese, pheasants, and partridges, but very few wild quadrupeds.

Minerals.] Japan abounds in gold and silver, particularly in the former, which is found in many places. But every mine is under royal inspection; and only a certain quantity is allowed to be dug, that the metal may not be too much diminished in value. Gold is not exported; it is used in gilding, in embroidering, and for coining. The purest and the richest mines are in *Sado,* the largest of the small islands adjoining Nifon. Silver, though not scarce, is not so plentiful as formerly, as instead of exporting it, the Japanese gladly receive it from foreigners in exchange for other commodities. It is chiefly found in the province of Bingo, in the S.W. quarter of Nifon. The copper of Japan is unequalled by that of any other country, and contains a large portion of gold. It is exported in large quantities by the Dutch and Chinese merchants; and, besides being applied to many domestic purposes, it is coined into money of low value. Iron is scarcer than any other metal; but is furnished by some of the provinces, and seems to be in sufficient quantity for the use of the inhabitants, since

they neither export nor import it. The Japanese form it into various kinds of tools, and sword-blades of exquisite temper. Amber is sometimes found. Brimstone is plentiful, especially in the western part of Kiusiu; coal is likewise abundant. Agate, asbestos, steatites, pumice, and white marble, are mentioned among the produce of these islands. Thunberg mentions two kinds of fine porcelain-clay wrought in Japan, namely, *kaolin*, and *petunsee*. Tin, or white copper, is found in some of the provinces; with a kind of naphtha, which is used in lamps.

Population.] Of the number of inhabitants in Japan, Europeans are necessarily ignorant, since the jealousy of the government effectually prevents any inquiries being made. Every traveller who has visited this country describes it as exceedingly populous. Kæmpfer assures us that the number of people one encounters on the roads and highways is incredible. Some have estimated the population of Japan at 30,000,000; others at 50,000,000; and others, amongst whom are Brun and Fabri, at only 10,000,000 of souls. We are utterly unable to decide the point, but should incline to estimate the population of the Japanese at double the latter number. The Japanese are, by Thunberg, described as being well-made, and possessing great freedom and vigour in the use of their limbs, though, in bodily strength, he supposed them to be much inferior to the inhabitants of the north of Europe. In external appearance, they considerably resemble the Chinese, from whom they are probably descended. They are middle-sized, seldom corpulent, and of a yellowish colour, in some more white, in others approaching to brown. Their eyes have a close resemblance to those of the Chinese. "These organs," says Thunberg, "have not that rotundity which those of other nations exhibit, but are oblong, small, and sunk deeper in the head; in consequence of which these people have almost the appearance of being pink-eyed. In other respects their eyes are dark brown, or rather black, and the eye-lids form in the great angle of the eye a deep furrow, which makes the Japanese look as if they were sharpsighted, and discriminates them from other nations. The eyebrows are also placed somewhat higher." They have, for the most part, large heads, short necks, and black hair. The nose is short and thick, though without any appearance of flatness.

Manners and Customs.] The Japanese dress, though in some respects a little different from that of the Chinese, appears in general to have a strong resemblance to it. The chief part of it consists of several long loose robes, worn one over another, and fastened round the waist with a girdle. The form of these cloaks is in all ranks the same; the only difference being in the material,—the rich wearing them of silk, the poor of cotton. The robes of the women are distinguished from those of the men, only by being a little longer. The robes of a man generally reach to his ankles; but when engaged in a journey, or if of the military profession, they are either cut short, or tucked up so as to reach only to the knees. The sleeves are wide, and longer than the arms. In winter, the garments are made of thick cloth, and are lined; in summer, they are of thin cloth without lining; and when the weather is very warm, the dress is entirely removed from the upper part of the body, and suffered to hang down upon the girdle. The neck is always bare. To the girdle are usually fastened a sabre, fan, tobacco-pipe, a box containing some medicines, and a pocket for smaller articles. Over these long robes are worn, on some particular occasions, a kind of short cloak, made of different materials, according as it is meant to display the rank of the wearer, or is used as a habit of cere-

mony. Under the upper garments are worn a kind of loose drawers which reach to the ankles: these are either black, or stripped with brown or green. Stockings are unknown; though the soldiers, who use short garments, wear a kind of boots of cotton; and in winter, many use a kind of socks to preserve their feet from the cold. Shoes, in the European sense of the word, are unknown. The slippers are formed of rice straw, interwoven; and, sometimes, for those of the higher ranks, of split canes. These slippers are fastened on the foot by a strap, which crosses it about the middle, and from which another passes between the toes to the extremity of the shoe. They are soon worn out; so that he who intends to walk to a considerable distance, takes two or three pairs along with him. In winter or in wet weather, a kind of wooden clogs is used. The Japanese never enter their houses without putting off their slippers; being unwilling to soil the neat carpets with which the floors are covered.

The Japanese differ from the Chinese, in the mode of dressing their hair, more than in any other part of their dress. The whole head is shaven, except a little upon the temples and neck. What is left is dressed with greasy substances, and, being turned up, is tied upon the crown of the head. The ends are then cut off about a finger's length above the tying, and the point thus formed, is turned down, so as to touch the head. Priests and physicians are the only classes who shave the whole head. Boys wear their hair till the beard begins to grow. The women never cut their hair, unless they be separated from their husbands; and in that case they shave the whole head. Among the female sex, the hair is either tied in a bunch on the top of the head, or dressed in such a manner as to have the appearance of wings, on each side. In the hair, the women wear a few ornaments, chiefly different kinds of combs, made in various forms. Hats are seldom worn. Ear-rings are unknown. Ornaments in dress, indeed, appear to be much less common here, than is generally the case in civilized nations. The mode of dress which has just been described is common to the prince with the peasant. In their domestic economy, they have a near resemblance to the Chinese. In neither of the countries is polygamy prohibited; but every man has one woman, who may, with propriety, be called his wife, and who has much authority over every other female who may be introduced into the family. A wife in Japan, as in China, must be purchased. The lover is not permitted to see his mistress; and, if she answers not his ideas, she may be returned, as in China, under a certain penalty. The subjection of the wife to the husband is still more severe than in China. The only law to which a married woman can appeal, is the will of her husband. If she be seen to speak to another man, unless he be one of her near relations, she may be put to death. The ceremony of marriage is performed in a temple. The bride lights a torch at the altar, and the bridegroom lights another at hers, and this significant emblem constitutes the ceremonial of marriage.

As cattle are scarce, animal food is seldom used. When presented, it is brought in upon lacquered wooden vessels, or in dishes of porcelain, cut into small pieces, and dressed with different kinds of sauces. A kind of beer made of rice is the common drink; but spirituous liquors are seldom used, and wine is unknown. Tea is used by all ranks, and is highly esteemed. The smoking of tobacco, which is said to have been introduced by the Portuguese, is now common.

The houses in Japan have seldom more than one floor; when they have two, the upper is used only as a garret for lumber. The style of architec-

ture resembles that of China: but dwelling-houses, though equally neat, are said to be less gaudy. They are generally of wood; and consist of one large apartment, which, by moveable partitions, or by mats, is divided into as many smaller apartments as are necessary. The floors are always covered with handsome carpets, and straw mats supply the place of seats.

Many of the institutions of private life seem to resemble those of China. The same degree of formality is not perhaps general; but they have the festivals, the games, and the public amusements, which are common only in the latter country. Among their festivals, the feast of lanthorns makes an elegant appearance. Theatrical amusements are also common; and, in the display of fireworks, they are said to excel even the Chinese.

Of some of the more elevated personages, the bodies are burned,—a custom which, if it ever prevailed in China, appears there to be laid aside. In general, however, in Japan, as in China, the dead are buried. The ceremonials of burial seem to be in both countries the same; periodical visits are paid to the tombs, in the one country, as well as in the other. Instead of the long and narrow coffin of the European, the Japanese are accustomed to thrust the corpse into a sort of tub not above three feet high.

The Japanese, according to Thunberg, are in general intelligent, courteous, inquisitive, industrious, sober, cleanly, honest, superstitious, proud, unforgiving, and brave. Although we may rationally conclude, that to any national character of them that can be drawn, many exceptions may be found; yet the great body of the people in this country, are more likely to have a fixed and peculiar disposition, than where commercial intercourse has mingled together the customs and manners of many nations, and where frequent revolutions have altered the political and civil institutions of the country. In general, however, it may be observed, that the greater part of the qualities which Thunberg attributes to the Japanese, may be deduced from their long established existence as a civilized people, from their civilization being superior to that of all the neighbouring nations, except the Chinese, and from their want of intercourse with strangers.

Science and Literature.] Many of the eastern nations seem to have excelled the Japanese in scientific pursuits. In this respect, they appear not to equal the Chinese. Astronomy is said to be studied amongst them; but they cannot even form an ordinary kalendar, or calculate an eclipse of the moon, without the assistance of the Chinese or Dutch. Their medical knowledge is not greatly superior to their knowledge of astronomy. They are acquainted with the virtues of a few simples; but, from their ignorance of the true nature of diseases, they often apply them in an erroneous manner. The laws are few and simple, and are said to be enforced with the most severe impartiality. With regard to chemistry, and all the different branches of natural philosophy, their ignorance seems to be almost complete. In their historical narrations, their principal epoch seems to correspond with the year 660 before the Christian era; so that the year 1830 of the latter, corresponds with the year 2490 of the former. Their week, like that of the Birman empire, consists of a half-moon, or fourteen days. The year begins in February or March. It is measured by lunar months; so that an intercalary month must be often introduced, to make the beginning of the year correspond with the motion of the sun. The day is divided into twelve hours. Clocks, or hour-glasses, are not known; time is measured by the burning of tapers, and the hour is proclaimed by

striking on bells in the temples. Music, poetry, and painting, are cultivated. The Japanese music is not agreeable to the ears of Europeans. Their poetry is said to resemble that of the Chinese, and their painting is probably no less defective than that of the latter. Their printing is precisely the same; but their ink and their paper are said to be much superior. They have long been acquainted with gunpowder; and in the fabrication of all kinds of weapons, particularly of sabres, they are unequalled.

Language.] The language of Japan is supposed to have been originally a dialect of the Chinese. The written language seems to have retained more of its original resemblance than the spoken language. Like that of the Chinese, their writing is in columns from the top of the page downward. The popular dialect has an alphabet of 48 letters; the Chinese character is used in the court language. Besides the vernacular language, the sacred language of the Boodhist priesthood is also used in Japan, and its characters, like those of the sacred character of Tibet, are derived from the Sanscrit, and consequently of Indian origin. The priesthood denominate these characters *Brahamooma*, because derived from the Brahmins. Dr Siebold, who discovered this fact, also found a treatise on the Sanscrit language, printed at Soo-jako, in Chinese and Japanese characters. It is called *Sittan Mata Tumer*, or 'Perfection of Indian Letters.' The alphabet seems to be of Southern Indian origin. This new fact shows us, that wherever the Boodhists, went they carried with them their sacred books and sacred language; and that this sacred language must be carefully distinguished from the vernacular language and alphabet of those countries where Boodhism is the established system.

Religion.] The religious sects in Japan are three; the most ancient religion of the country, or that which is now known by the name of the sect of *Sinto*,—the religion of *Budsdo*, which was imported from Hindostan, and is the same with that of Boodha, or Godama,—and the sect of philosophers, who are, properly speaking, pure deists.

The sect of Sinto, believe in the existence of one Supreme Being, to whose omnipotence all things owe their existence. To this Being they attribute every perfection of which they can form any idea; but they suppose his nature to be too exalted, to permit him to interfere in the government of this world, which is only an inferior portion of the universe; he has, therefore, committed the care of all sublunary matters to inferior beings, on whom are bestowed different degrees of power, according to the nature of the station which each of them is to fill. As these inferior deities have the immediate care of man, and of all that belongs to him, they are regarded as the proper objects of his daily worship. The Great Deity requires the greatest veneration, but does not demand continual adoration. To impress common minds with sublime ideas of this Great God, and of his power, different means are used. His images are made of immense size. Thunberg mentions one, made of wood, so large that six men could sit on its wrist, in the eastern mode. His power is sometimes expressed by the number of deities who surround him. Thunberg notices one image of the Supreme God, which was surrounded by no fewer than 33,333 subordinate divinities. This sect holds the immortality of the soul; but they admit not of the metempsychosis. They believe that, immediately after death, the soul of each individual is conducted into a state of happiness or misery, according as his deeds have been good or evil. To do good, is to obey the dictates of conscience, and to submit to the laws of the country. They abstain from animal food, and are averse to touch any

dead body. A mirror of polished metal often constitutes the only furniture of a temple, being intended symbolically to remind the worshipper, that his external appearance is not more exactly represented by that mirror, than his most private thoughts are known to the deity whom he worships. The temples are constructed in a manner which has some resemblance to the Abyssinian churches; having around them a covered walk for the accommodation of the worshippers. The priests are of two kinds: such as are untaught, and wait upon the temples, in order to perform the drudgeries of religion, and such as are initiated into the more mysterious parts of their doctrines, and are appointed to teach the people.

The sect of Budsdo profess a religion, which, as has been already remarked, is the same with that of Godama among the Birmans. In its course through China, towards this country, it has undergone a few alterations. These, however, are so inconsiderable, that they require not to be enumerated.

The philosophers of Japan have adopted a doctrine which has a near resemblance to that of Confucius in China, and from which it has probably been borrowed. They believe in an omnipotent and omnipresent Deity, whom they denominate 'the soul of the world.' As they imagine his power to be unlimited, and that he is at all times present in every part, they bestow upon him no inferior agents, or subordinate divinities. Temples and images they affirm to be altogether unnecessary. The most agreeable worship of the deity, they believe to be the performance of such moral duties, as are necessary for the good of society. They are said to deny the immortality of the soul; and to give their warmest approbation to suicide.

As has been already mentioned, the month is divided into portions of fourteen days. The last day of each of these portions is celebrated as a holiday; and, at that period, the temples are much frequented. Besides the monthly holidays, there are several annual festivals. Of the grand festivals there are five: the first on the first day of the year—the second, or the feast of dolls, on the third day of the third month,—the third, which has a military cast, on the fifth day of the fifth month,—the fourth, in honour of certain constellations, on the seventh day of the seventh month,—and the fifth on the ninth day of the ninth month. It is to be observed that these are all odd numbers; and are consequently unlucky; for this reason, all public business is stopt. The serious betake themselves to the temples, to perform some act of devotion; while the volatile amuse themselves with such diversions as strike the fancy

Like the Mahommedans, the Japanese have attached to some of their temples a peculiar character of sanctity. To perform a pilgrimage to any of these, is esteemed a highly meritorious action: and it is incumbent on every individual, to undertake a pilgrimage to the temple of Ifie, at least once in his life. Besides the priests who take care of the temples, there are several other classes dedicated to the source of religion. Of these the most extraordinary is a class of which every member is blind. The monks of the order of *Jammabos*, or 'monks of the mountains,' are continually employed wandering in the most unfrequented parts of the mountains, and imposing on themselves many kinds of penance. They bathe themselves frequently, and live chiefly upon vegetables. They pretend to possess many supernatural powers, such as that of foretelling future events, discovering what is hid, or curing disorders. Nunneries are likewise established in different parts. Their number is said to be considerable. Vows, and

other superstitious practices, are common; particularly among the lower classes.

The Christian religion was introduced into Japan in 1549. During a considerable time it made a very great progress; and appeared to the government to be so worthy of encouragement, that an embassy, with rich presents, was sent to pope Gregory XIII. The conduct of the Jesuit missionaries, however, and of the Portuguese, who had settled here in great numbers, was such, as ultimately led to an excluding decree directed against all Christians. A persecution was commenced; and an affront which was offered to a Japanese prince by a Portuguese prelate, produced an order, that all Christians, who did not leave the empire immediately, should be exterminated. This took place in 1586. The order was effectually executed; and many thousands of Christians perished; but it was not till 1638 that the form of Christianity was finally extirpated in this country.

Government, &c.] The empire of Japan is subject to the jurisdiction of a temporal emperor, who has the absolute direction of all civil and political concerns; and of a spiritual ruler, who has sway in what regards religion. The secular emperor is called *Cubo Sama*, or *Djogown;* the religious ruler is called *Dairi.* The latter derives his lineage, in uninterrupted succession, from the ancient emperors of the country, who enjoyed supreme power, from the year 660 B.C. till the year 1142. At that period, the generals of the army began to arrogate into their own hands a considerable share of authority; and in 1585, Gonjin, one of the generals, and the founder of the present dynasty, assumed into his own hands the absolute power in temporal matters, and confined the authority of the Dairi to such things as are purely spiritual.

The Dairi, though his authority be confined to matters of religion, enjoys much of the reverence of the people. He is honoured as a god. He seldom leaves his temple; since to expose himself to the view of any human creature, or even to the light of the sun, would be debasing the excellency of his nature. When he goes from one place to another, he is carried upon men's shoulders that he may not come in contact with the earth. He is, however, only a splendid prisoner, since he is not permitted to go beyond the bounds of his palace in which he was born. His nails must be pared, and his hair must be cut, only during night, that the day may not witness the destruction of what is believed to be so sacred! He never uses the same vessel or clothes twice: all his dishes are broken as soon as they are removed from his table, that they may not fall into unhallowed hands. His name is seldom known till after his death. His court consists generally of his own relations. He has 12 wives, of whom one only is esteemed as empress. The Dairi has the power of conferring, not only all ecclesiastical, but all civil titles of distinction. The Cubo Sama himself receives his designation from the spiritual emperor; and, by his recommendation, the chief nobles receive their titles from the same hand. The revenues which sustain the splendour of the dairi, are derived chiefly from the town of Meaco and the district round it. Those who have received spiritual titles are distinguished by a particular habit. The spiritual emperor is visited by the temporal emperor, or by an ambassador in his name, once every year; the former, on that occasion, always receives from the latter many valuable presents. The palace of the dairi is extensive and magnificent. It contains the only seminary in Japan which resembles a university. To increase the apparent splendour of the

Dairi, but in reality to prevent him from effecting any revolution in the government, a captain is appointed, with a strong guard, to reside within the palace of the spiritual potentate, and to take care of his person.

All this, however, is little more than empty pageantry; the real power of the empire being vested in the temporal sovereign. This monarch resides at Jedo; and with the assistance of six privy councillors, regulates the general concerns of the empire. As is the case in China, each of the provinces is governed by a chief, who, within his own district, enjoys an authority which is nearly absolute. These governors are accountable to the Cubo Sama. They are obliged to visit the court at Jedo annually; to bring with them considerable presents; and to remain there half the year; when they depart, their families are retained at court as hostages for their good conduct. The Japanese have not that number of tribunals by which the government of the Chinese is distinguished; nor does so much formal regularity appear to pervade their transactions.

Travellers have often expatiated on the excellence of the Japanese laws; but as they say little concerning any code of laws which are universally observed, it is impossible to know whether their encomiums are just or not. Their chief excellence seems to consist in their being few in number, and simple in their nature. They appear likewise to be administered with impartial severity. Death is more common than any other punishment. "All military men," says Titsingh, "the servants of the Djogoun, and persons holding civil offices under the government, are bound, when they have committed any crime, to rip themselves up, but not till they have received an order from the court to that effect; for, if they were to anticipate this order, their heirs would run the risk of being deprived of their places and property. For this reason, all the officers of government are provided, in addition to their usual dress, and that which they put on in case of fire, with a suite necessary on such an occasion, which they carry with them whenever they travel from home. It consists of a white robe and a habit of ceremony made of hempen cloth, and without armorial bearings. The outside of the house is hung with white stuffs; for the palaces of the great, and the places at which they stop by the way when going to or returning from Yedo, are hung with coloured stuffs on which their arms are embroidered,—a privilege enjoyed also by the Dutch envoy. As soon as the order of the court has been communicated to the culprit, he invites his intimate friends for the appointed day, and regales them with *zakki*. After they have drunken together some time, he takes leave of them; and the order of the court is then read to him once more. Among the great, this reading takes place in presence of their secretary and the inspector: the person who performs the principal part in this tragic scene, then addresses a speech or compliment to the company; after which he inclines his head towards the mat, draws his sabre, and cuts himself with it across the belly, penetrating to the bowels. One of his confidential servants, who takes his place behind him, then strikes off his head. Such as wish to display superior courage, after the cross cut, inflict a second longitudinally, and then a third in the throat. No disgrace is attached to such a death, and the son succeeds to the father's place. When a person is conscious of having committed some crime, and apprehensive of being thereby disgraced, he puts an end to his own life, to spare his family the ruinous consequences of judicial proceedings. This practice is so common, that scarcely any notice is taken of such an event The sons of all people of quality exercise themselves in their youth, for five or six years, with a view that they

may perform the operation, in case of need, with gracefulness and dexterity; and they take as much pains to acquire this accomplishment as youth among us do to become elegant dancers, or skilful horsemen Hence, the profound contempt of death which they imbibe even in their earliest years. This disregard of death, which they prefer to the slightest disgrace, extends to the very lowest classes among the Japanese."

The principal laws of the empire are posted up in every city in large characters, that they may be open to public inspection, and that no one may be ignorant of his duty. The police of the cities seems to have more resemblance to that of the Chinese, than any other part of their government. Each city has a superintendent, who has under him several superintendents of separate districts, who, in their turns, take the charge of such as are intrusted with the care of a particular street, or with part of a street. Several of the inhabitants patrole the streets at night, to give notice of the appearance of fire, and to take care that no disturbance be raised with impunity. It is, perhaps, owing to this careful and regular police, no less than to the severity of the general laws, that crimes are seldom committed.[1]

[1] The rigidness with which that part of their code of police which relates to the exclusion of foreigners from the kingdom, was strikingly illustrated by the reception and treatment of Resanoff's Russian mission, in 1806. From the first day to the last of the ship's remaining at anchor at Nagasaki, a great number of guard-boats were stationed round it in close order, through which no Japanese boat, excepting those that brought the *banjos*, or 'great men,' and interpreters on official visits, ever attempted to pass, though great multitudes of parties of curiosity and pleasure were sometimes rowing about on the outside. The Russians were not permitted to take any such pleasure. The element they had been beating through, in whatever manner or direction they pleased, so many thousand leagues, became too sacred for the slightest liberties within a little dent of the shore of Japan. Six weeks of diplomatic and ceremonial quarantine would not probably have sufficed, without the additional circumstance of the "pretended illness of the ambassador," to obtain the concession of the privilege to walk in a little spot on shore, of the following dimensions and advantages. "This place," says Krusenstern, "was close to the shore, in a confined bay, and was shut in on the land side with a high wall of bamboos; and although its whole length did not exceed 100 paces, and its width at the most was 40, there were two watch-houses erected in its immediate vicinity. One single tree, but not a blade of grass adorned this promenade, which was entirely upon a rocky ground. This place of course could not answer its intended purpose, nor was it used as such; but it was of great advantage for our astronomical observations, which the Japanese did not in any way attempt to disturb. As soon as any boat put off from the ship, for Kibatsch, for so this promenade was called, a fleet of 10 or 15 vessels immediately put themselves in motion, surrounding the boat on all sides, and in this same manner it was conducted back again." The house was situated on a neck of land, so near the sea that, on the S. and E. side, the water at high tide came close under the windows. "When I say windows," continues Krusenstern, "indeed, I make use of an improper expression; for this word can scarcely apply to a square space about a foot wide, provided with a double lattice-work, and which, therefore, admitted but very little light into the room. A high bamboo fence surrounded the whole building, not only towards the land, but even on the sea-face in spite of the waves, the protection of which the Japanese did not seem to consider as sufficient. Besides these, there were two rows of bamboo canes carried from the door down to the sea, as far as the tide ebbed, in order that when the boats came from the ship, they might only land between these canes, a precaution which scarcely would answer any one purpose. A large gate, with double locks, formed the entrance from the water-side. An officer, whose station was near the ship, had the keys of the outer locks, and another, who lived in *Megasaki*,—as the ambassador's residence was called,—those of the inside: and when any boat went on shore it was necessary that the keeper of the outward keys should accompany it to open his side, after which the inside was unlocked; and in like manner, when any one on shore was desirous of going to the ship, the porter of Megasaki opened the inside, when the vessel, on board of which was the keeper of the outer keys, had to repair to the house to perform the same duty. Besides this precaution, the gates were never left open upwards of five minutes; and though they sometimes knew that the persons would return immediately, the porter would rather take the trouble of locking and unlocking the gates again than leave them open during this length of time." They counted always the number of persons

Revenue.] The emperor of Japan derives the chief part of his revenue from lands immediately belonging to the crown. Each governor receives the whole revenue of his particular province. With this he defrays the expenses of government, and maintains the roads and other public works; and from the remainder he makes an annual present to the emperor, which may be only a concealed method of making him pay his balance. Thunberg computes the produce of the crown-lands to amount to 44,400,000, sacks of rice; each sack containing 20 pounds; but, unless we knew the value of rice in Japan, this conveys no clear idea of their worth. Of the total revenue of Japan as an empire, Europeans seem not to have materials for a proper calculation; but some French geographers have ventured to estimate it at 814,820,000 francs, while Varenius calculates it at £20,000,000!

Military Force.] The army of Japan is said to amount, in time of peace, to more than half a million, and in time of war, the number might be greatly augmented. Their arms are bows, arrows, sabres, and spears. Muskets are not in general use. The bows and arrows are long. The sabres are thick in the back, and about a yard in length, with a slight curve; they are so exquisitely tempered that it is said they will cut through a large nail, without any injury to the edge. Their marine force consists only of a few small ships. Their vessels are flat in the stern, and incapable of withstanding the waves of a heavy sea; and though the mariner's compass is used among them as well as among the Chinese, they are very awkward and ignorant sailors. It is, indeed, hardly conceivable, says Malte Brun, how they could attempt in former times to keep up an intercourse with Formosa, and even with Java, as they are said to have done. Their navigation to the N., according to some Japanese maps, extended as far as the American coast in the neighbourhood of Behring's Straits, which they called Foosang. At present they scarcely venture farther than Iesso; and the inhabitants of that island speak of their voyages to *Rakkosima*, or 'the Country of Sea lions,' which is probably either Behring's Island or Kamtchatka, as the Greeks did of the voyage of the Argonauts.

Commerce.] It has been formerly remarked, that this empire has long ceased to give any encouragement to foreign commerce. The Chinese and the Dutch alone are permitted to enter their harbours; and, even with regard to them, the strictest regulations are observed. The Dutch, as they are known to be Christians, are more narrowly watched than the Chinese, whose religious ideas and political institutions have a greater resemblance to those of the empire. When the Dutch ships are expected, watchmen are placed upon the highest hills in the neighbourhood of the port which they are to enter; so that their approach is known a considerable time before their arrival. They no sooner enter the harbour, than they are boarded by officers from Nagasaky, accompanied by interpreters; for the Japanese are unwilling that foreigners should even learn their language.[5] No duties

who came on shore, and the boat was never allowed to return without a similar number; and if any officer of the ship wished to pass the night in Megasaki, one of the persons residing on shore was obliged to go back in his stead; and in like manner, when any officer belonging to the ambassador's suite was desirous of sleeping on board, some sailor had to fill his place on shore; for the appointed number of persons residing there was neither to be increased nor diminished, nor was any attention paid to their quality in this respect, but only to their numbers.

[5] The Dutch interpreters are by birth Japanese, and are paid by the government for learning the Dutch language.

are charged upon the goods imported; but the greatest care is taken that no prohibited goods be landed. For this purpose, when any person goes ashore, he is carefully searched before he leaves the ship, and after he has landed. Every native who comes on board, except the superior officers, is searched in the same manner; and every thing imported or exported undergoes a double examination. The imports of the Dutch are coarse sugar, ivory, tin, lead, cast iron, chintzes, Dutch cloth, wood for dying, and tortoise-shell. Besides these articles, the officers of the ship often take, on their own account, saffron, sealing-wax, glass-beads, watches, and other trifles. From the Japanese they receive copper and raw camphor. The profits of the trade, however, are said to be so inconsiderable, that only two ships have of late been annually despatched. These ships sail from Batavia in June; and return towards the end of the year. The trade with the Chinese is much more considerable than that carried on with the Dutch. From China are received raw silk, sugar, turpentine, and drugs; and in return are given, copper, lacquered ware, and other manufactured goods.

But, though the foreign trade of the Japanese be so inconsiderable, their internal commerce, like that of the Chinese, is very great. Every harbour is crowded with vessels; the cities abound in shops; and numerous fairs are held in different parts of the country, to which astonishing crowds resort. For the purpose of internal commerce, the roads are kept in a good state; but canals have not yet been formed. The islands, indeed, are so mountainous, as to render the formation of canals almost impossible; and the proximity of the sea to every part of the country renders it unnecessary.

Monies.] The Japanese have coins of gold, of silver, and of copper; some of them of remarkable forms, and having devices no less remarkable. The *senis* or iron coins, like those of the Chinese, have a square hole in the middle, by which a certain number of them are strung together. 600 of these make a *thail* or *tayel*, which is worth about 6*s*. 6*d*. of our money. Large payments are generally made in silver ingots.

TOPOGRAPHY.] The empire of Japan is divided into 68 districts or principalities, and 7 large provinces. These latter are, according to Roberts's chart, published at Weimar in 1811, *Ochio*, *Quanto*, *Jetsegen*, *Jetsen*, *Jamaisoit*, *Kiusiu*, and *Sikoko*.

Island of Nifon.] The island of Nifon, which of itself forms nearly 5-12ths of the whole area of the empire of Japan, is situated between 33° 30′ and 41° 30′ N. lat.; to the N.E. of Kiusiu and Sikoko, and to the S.W. of Jeso. It is washed on the N.W. by the sea of Japan; on the E. and S. by the Great ocean; and between its western and S.E. extremity is separated from Korea by the straits of that name. It is about 600 miles in length, by 250 in breadth. Its shores are rocky and intersected by numerous bays, amongst which are those of *Jedo*, *Totomina*, *Ovari*, and *Osaka*. Near its N.E. extremity are situated capes *Sangar* and *Nambou*; capes *Noto* and *Gamaley* are situated on the N.W. coast; and capes *Ava* and *Diun* on the S. coast. *Jedo*, the capital of the empire, is situated on a bay, on the S.E. side of the island. According to the affirmations of the Japanese, Jedo is not less than 21 leagues in circumference, which, supposing it to be circular, makes its length to be at least 21 miles. The circumference of the emperor's palace alone is said to be five leagues. If this extent be truly reported, great part of the space must be occupied by gardens and open courts; and as many of the grandees have, in this

city, splendid palaces, we may believe that the population, though undoubtedly great, is not proportionate to the extent. The city is watered by a large river, which falls into the harbour in the neighbourhood; but this harbour is so shallow, that the European ships which generally navigate those seas, can approach no nearer than 15 miles.—The residence of the superintendent of the spiritual concerns of the empire is called *Meaco.* It is an inland city, and stands on a plain about 160 miles S.W. from Jedo. Besides being the seat of the chief priests, and of the learned men of the nation, Meaco is the principal seat of manufactures, and of trade. The number of inhabitants, in 1674, according to Kempfer, was 405,542; but in this enumeration were not included the numerous attendants in the chief spiritual court.—The five provinces adjoining, reserved for the maintenance of the imperial court, are comprehended under the name of *Gokinaï;* they abound in rice and pulse. In one of them, called *Sitz* or *Sidsjow,* we find the important city of *Osacca,* the port of *Meaco,* and one of the most flourishing cities of the empire. The canals by which it is intersected, and which are crossed by bridges of cedar, remind us of Venice. The pleasures which predominate here, together with the great abundance and easy price of provisions, attract a great many who are in quest of voluptuous indulgence.—*Fiogo* in the same province, on the gulf of Osacca, possesses a harbour protected by a very large mole.—*Mooroo,* in the province of Farima, is furnished with a natural harbour. Horses' hides are manufactured into leather at this place in the manner of the Russians. The towns on the northern and western coasts of the island of Nifon are only known to us by name. We remark in general, that the cities in the empire are numerous, but are too little known to be particularly described. Japan seems to differ from China, in having many villages of great size. They consist generally of a single street; but that street is commonly of great length, often not less than several leagues.

Island of Kiusiu.] This island is situated between 30° 56′ and 34° N. lat. It is the most southerly and westerly of the larger Japanese islands. It is separated from Nifon on the N. by a strait about 2 miles in breadth. Its length from N. to S. is about 250 miles, and its breadth 60. Cape *Tchitchagof* forms its southern extremity; and on its eastern coast we recognise capes *Nagacf, D'Anville,* and *Cochrane.* On the western coast are the bays of *Satsuma, Simabara,* and *Elmoura.* The mountains are chiefly volcanic, and of these the principal peak has been denominated *Peak Horner* by Krusenstern. In March and April, 1826, this island was visited by several severe earthquakes. The principal town and harbour of this island is Nagasaki. This place was formerly nothing more than a village, and is indebted to the Portuguese commerce for its prosperity and importance. Nagasaki contains 87 streets, each 130 yards long, which is the length legally assigned to a street; the houses therefore may be reckoned at 1000. When approached by sea, this city presents views which would be sought for in vain in the most celebrated of our picturesque gardens. A rock 238 paces long is the only place in which the Dutch merchants are allowed to reside, where they live in a state of seclusion and solitude worse than monkish, immersed in a total ignorance of the whole world beside.—Among the other towns are: *Sanga,* celebrated for beautiful women, and a manufacture of almost transparent porcelain; *Kokura,* the place from which people pass to Simonoseki in the isle of Nifon; and Cangoxima, where the Portuguese landed when they first discovered this country.—The dependent islands of *Firando* and *Amakusa* had great ce-

lebrity at that epoch, from being the first seats of the Christian religion. The isle of *Tsootsima*, between Kiusiu and Korea, forms a principality which was tributary to the Koreans before it became subject to the Japanese.—The archipelago of *Gotto* terminates Japan on the S.W.

Island of Sikoko.] Sikoko lies to the S.W. of Nifon and to the W. of Kiusiu. On its east coast we recognise *Cape Otsechaki*, and *Ojen*; and on its western coast *Cape Misaki*.

Islands of Jesso.] The islands of Jesso, situated to the north of Japan, are some of them subject to the empire of Japan, particularly that called *Matmai*, immediately to the N. of Nifon. It is described as being well-wooded, but in an indifferent state of cultivation. The inhabitants are far from having obtained a degree of civilization equal to that of the Japanese: they are still in the state of hunters and fishers.—To the N.E. of *Matmai* are the islands of *Kunachir* and *Zellany*. Three islands, still farther to the N.E., are known to navigators by the name of the *Three Sisters*. Of these islands little is known; and that little is not calculated to interest or instruct.

Saghalian, or *Tchoka.*] This island, the most important portion of land, explored by the unfortunate La Perouse, is separated from the continent of Chinese Tartary, by the narrowest part of the channel of Tartary. Before La Perouse's voyage, its dimensions were believed to be much less than they are in reality; D'Anville placing the southern extremity 4° to the N. of Jesso, whereas it is separated from these islands by a strait, about 20 miles in breadth, to which the name of Perouse has been given. The length of the island is not less than 480 geographical miles; since, according to the French navigator, it extends between 46° and 54° N. lat.; the breadth, however, is not proportional; being, on an average, not more than 80 miles. The interior appears to be mountainous, particularly towards the centre. The eastern coast consists of wooded valleys and hills, behind which arise lofty mountains covered with snow. To the south of the 51st degree, the country becomes more level, and exhibits only hills of sand. The soil in many places exhibits a vigorous vegetation, and is covered with forests of pine, oak, willow, and birch. The surrounding sea produces an extraordinary quantity of fish, while the rivers abound with trout and salmon of the very best quality. Roses, angelica, and other flowers, flourish on the hills.—The inhabitants are described by Perouse as being nearly of the middle size, strong made, and somewhat inclined to corpulency. The head is large, the face broad and round, the colour tawny, but rendered more dark by continual exposure to the weather. The nostrils are broad, the nose short, and round at the extremity. The eyebrows are bushy, and the eyes, which are for the most part black, though sometimes blue, are generally lively. The lips are of a deep red, and commonly thick; and the voice is not unfrequently strong. The teeth are white and even; and the chin is round, and somewhat prominent. The features of the women are similar to those of the men; but their stature is more diminutive, and their form rounder and more delicate. They have the upper lip tattooed blue, while some of the men have on it a spot of blue paint. Their ears are perforated, and decorated with ornaments of glass, or of silver. The hair of both sexes is black and smooth. The men have long beards. They cut their hair into the form of a brush upon the forehead and the temples, and wear it about six inches long behind. The dress, which is nearly the same for both sexes, consists of a kind of cloak, made of skin, or quilted nankeen, reaching below the knees, and

fastened round the middle with a girdle. Drawers are reckoned unnecessary. The greater part have no covering either for the head or the feet; but some wear a kind of vest, made of seal-skin; and a few have on the head a bandage of bear-skin, intended more for ornament than use. In the girdle, by which their cloak is fastened, is fixed their dagger, with several pockets, for the purpose of containing such small articles as they think proper to carry about. Their arms are bows, aud several kinds of spears or lances. Their habitations, in general, are about 18 feet in length, by 15 in breadth; the sides are raised to the height of 3 or 4 feet, while the sloping roof rises in the middle, to the height of 12 feet. These habitations are formed of different posts, strongly joined together. The interstices are filled with bark, and the top is thatched with long grass. In the northern parts, the floor is the bare earth; in the southern parts, floors of planks are frequent. The fire is upon a kind of hearth, in the middle of the house, raised about six inches. Round the whole building are benches raised about 12 or 15 inches, covered with mats, and used for beds. In every house is an iron pot for cooking; with dishes of several shapes and sizes, formed sometimes of wood and sometimes of bark. As agriculture, if known, is not practised, they live chiefly upon such animals as they can kill, and on the fish furnished by the surrounding sea; to which they join such vegetables as grow wild. Each hut is furnished with a kind of storehouse reared for the purpose of containing their winter-provisions, which are laid up during summer. These provisions consist of dried fish, garlic, wild celery, angelica, a bulbous root, by them called apé, and fish-oil preserved in the stomachs of animals. The inhabitants of Tchoka are not destitute of ingenuity; on the contrary, they display a greater portion of it than is generally observed among an uncivilized people. Perouse assures us, that among them were observed weaving looms, which, though so small as to be easily removed from place to place, are constructed in so complete a manner, as to evince a great extent of mechanical knowledge. The bark of the willow, and the fibres of the nettle, are formed into thread, with a kind of spindle, probably similar to the distaff and spindle of Europe. A small commerce is carried on with the Russians from the northern parts, with the Japanese from the southern parts, and with the Mandshoor Tartars from the western coast. Their exports are inconsiderable, consisting only of a few furs, and a small quantity of oil, for which they receive such articles as these nations can furnish, and such as they chiefly want.

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Authorities.] Langsdorff's Voyages, 4to., Lond. 1814.—Broughton's Voyage of Discovery in 1795-8.—Thunberg's Travels in 1770-9.—Histoire des Japon, etc. par le Père Charlevoix Jesuite, Paris, 1754, 6 vols., 12mo.—Illustrations of Japan by M. Titsingh, 4to. Lond. 1822.—Laurie and Whittle's map of Japan and Korea.

CHAP. II.—ARCHIPELAGO OF LOO-CHOO.

The two chains of mountains which traverse Korea and Japan seem to approach one another, and have the appearance of being afterwards continued along the bed of the sea, so as to form a series of little archipelagoes extending

from Japan to the island of Formosa. In this maritime region—which is little known—we find the state of Loo-choo.

Historical Notice.] We are indebted to the narrative of Su-poa-quang, a learned Chinese, who was sent hither from China in the quality of an ambassador in 1719, for our first certain information respecting these islands. Kæmpfer had, indeed, previously mentioned them under the name of the islands of *Lequeyo*, but in an obscure and general manner. The missionary Gaubil introduced Su-poa-quang's narrative to the notice of Europe in the "Lettres Edifiantes." It was reserved, however, for the officers commanding the British frigates, the Alceste and Lyra—which had gone out with Lord Amherst to China—to make us more particularly acquainted with these islands and their interesting inhabitants. The natives trace their history back to a period anterior to the Christian era, but they appear to have had no communication with the rest of the world till about the year 605, when they were discovered by the Chinese. Gaubil says, that Loo-choo was not subjugated by China until seven centuries after this event, or about the 14th century; and he adds, that before that time, the principal island was divided into three political communities, whence it is called, in some maps, "the Island of the Three kings."

Number and Situation.] According to Gaubil, these islands form, as we have already stated, a sort of chain, or series of little archipelagoes, extending from *Kiu-siu*, the most southerly of the great islands of Japan, to the island of Formosa; there are in all 36, subject to the same government. To the S. of Kiu-siu, there are seven small islands, and a large one called *Tanaxima*, belonging to the Japanese empire; and, to the S. of these, 8 others, which belong to the king of Loo-choo; they are called *Oofoo Chima*, or 'the Islands of Oofoo;' the principal one is called *Oofoo* in the country itself, and *Tatao*, or 'the Great Island,' by the Chinese. These islands are fertile and populous, with the exception of *Kikiai*, which, however, like Oofoo, contains forests of fine large cedars. On the S.W. of these is the great island of *Loo-choo;* it is about 50 miles long, and from 12 to 15 broad. The king resides at its S. end, in a palace called Cheoole, in the neighbourhood of the capital *Kien-Ching* which has a sea port named *Napakiang*, at a distance of 5 miles. This place was found by the observations made on board the Alceste, to be in lat. 26° 14′ N. and in 127° 52′ 1″ E. long.; this is its S.W. point; the main body of the island extending from this N. and a little easterly. All the rocks about it are of coral, and immense masses, often of grotesque shapes, are seen every where along the sea-shore; many of the same nature are found on the higher land, at a distance from the beach, the origin of which may be considered as problematical, and is supposed by some to have been disguised by the action of volcanic fire having raised them to an elevation beyond the reach of the ocean in which they were generated. To the W. of this island there are 10 others, well-peopled and productive, with the exception of *Lung-hoang-chau*, or 'the Sulphur Island,' so called from the quantities of that substance which it affords. On the E. side of Formosa there are other 17, all dependent on the king of Loo-choo.

Climate and Productions.] The climate of Loo-choo is one of the most propitious in the world. Refreshed by the sea-breezes which blow over it at every period of the year, it is free from the extremes of heat and cold. The land does not contain those marshes which are so great a source of disease in the warmer latitudes, and the people appear to enjoy robust health. Nature has been bountiful in all her gifts to that favoured country;

such is the felicity of its soil and climate, that vegetable productions, very different in their nature, and generally found in regions very distant from each other, grow here side by side. Not only the orange and the lime, but the Indian banyan, and Norwegian fir, the tea-plant and sugar-cane, all flourish together. It abounds in rice, wheat, peas, melons, pine-apples, ginger, pepper, camphor, dye-woods, wood for fuel, silk, wax, and salt; it also yields coral and pearls. The animals are oxen, sheep, horses, deer, and winged game. Almost the whole animal creation here is of diminutive size, but all excellent in their kind; the bullocks seldom weigh more than 350 lbs., but are plump and well-conditioned, and the beef very fine; their goats and pigs are reduced in the same proportion, their poultry forming the only exception.

Inhabitants.] The inhabitants are of diminutive stature, the average height of the males not exceeding five feet two inches, and the women being of corresponding stature. They have a good deal of the Corean physiognomy, with more mildness, and exhibit nothing of the drowsy and elongated eye of the Chinese; still, however, as the Loo-choos, for the last thousand years or more, have been more or less under the influence of the Chinese religion, government, laws, and customs, they now present many points of agreement, and, in fact, differ very little from them. Not many years ago, a Loo-choo junk, on her voyage to Fokien, being driven to Macao, the Chinese of that place eagerly crowded on board, and hailed the crew as the descendants of the ancient Chinese, their dress and mode of pinning up the hair on the top of the head being the old costume of their countrymen before they were conquered and shorn by the Tartars. The narratives of captain Hall and Mr M'Leod are certainly well calculated to make an impression on the mind of the European public, highly favourable to the character and happy condition of the Loo-choos; and the Chinese and Japanese agree in speaking of them as a cheerful and happy people. Yet with all this, it seems evident that in their jealousy of strangers they are perfect Chinese. They have a priesthood of bonzes, who are generally educated in Japan. Their books on religion, morality, and science, are in the Chinese character; but for common purposes the Japanese letters are employed.

CHAP. III.—THE PHILIPPINES.

To the N. of Borneo we find the great archipelago of the Philippine islands, sometimes called the *Manillas.* They are said to be nearly 1,200 in number, and 400 of them are of considerable size; but our knowledge regarding this groupe is very circumscribed. They were discovered, in 1521, by Magellan, who lost his life here on the small island of Mactan, while engaged in that voyage in which man first completed the circumnavigation of the globe. Malte Brun, however, is of opinion that the Spaniards were acquainted with Luzon, or Manilla, the principal of the groupe, in 1511. The Spaniards, on establishing themselves here in 1560, gave the name of their king, *Philip*, only to the northern portion of the archipelago; the central part often receives the distinct appellation of the *Bissay* islands. All these islands are traversed by lofty chains of mountains in which volcanoes occur; earthquakes are often felt, and violent hurricanes frequently devastate the face of nature. There is nearly the same variety of seasons here as on the coast of Coromandel and Malabar. A humid climate preserves the appearance of perpetual spring throughout these islands; the

trees are always in leaf,—the fields almost constantly enamelled with flowers,—and the blossom and the fruit are often exhibited together on the same tree. The principal alimentary grain is rice; wheat was introduced by the Spaniards; and the cocoa was brought hither in 1670, and thrives admirably; but European fruit trees cease to bear fruit when transported thither. The orange-tree grows in the open fields to its full height. Among the indigenous plants is the wild banana tree, from the fibrous filaments of which a kind of cloth and ropes are manufactured. Cattle are numerous; and the numbers and varieties of fish amazingly great. The rivers are infested with crocodiles; and the damonpaly serpent is of the most poisonous kind. According to native traditions, all these islands, and especially Manilla, were once entirely possessed by negroes, who, when other races arrived on the coasts, fled to the mountains, which are still inhabited by their descendants. The practice of tattooing is followed here, and was at one time so frequent that the Spaniards, from this circumstance, gave some islands of the groupe the name of *Pintados*. M. Perouse supposed that the total population of the Philippines might be 3,000,000. In the Singapore Chronicle of 30th September, 1824, it was stated to be as follows:

Native Indians . .	2,396,331
Mestiges . .	118,030
Chinese . .	7,000
Whites . .	4,000
	2,525,361

Many of them, by their frequent intercourse with Europeans, have acquired a degree of energy and intelligence greatly superior to all the inhabitants of the more westerly islands. In intrepidity they greatly excel the Hindoos, and are hence generally employed as gunners and steersmen in the intercolonial navigation. The trade between the Philippines and Acapulco, in Mexico, was for ages conducted by one galleon of 1,200 or 1,500 tons. The well known narrative of Anson's capture of the Manilla galleon may convince us, not only of the great size, but also of the great value of these vessels. She used to sail, in July or August, with a cargo consisting of the manufactures of China and Hindostan, and the produce of the Spice and Sunda islands, and arrived at Acapulco in three or four months. The voyage back was performed in about half the time, with a cargo of cochineal, cocoa, Spanish wines, oil, wool, and bar-iron, but chiefly in ballast. It is a circumstance remarked by Mr Crawford, that the Philippines are the only islands of N.W. Oceanica which have improved in civilization, wealth, and population, in consequence of their intercourse with Europe. When first visited, they were inhabited by a race of savages inferior in every respect to any of the adjacent pagan nations; but now they are as decidedly superior. To understand the reason of this, it is sufficient to remark, that the Spanish government finding here no spices, no rich manufactures, no mines of precious metal, did not think of monopolizing commerce, but satisfied itself with drawing a fixed capitation tax from its native subjects, and freely distributed the unappropriated lands amongst the colonists. The consequence of this state of things was a free intermixture of the local society, and a communication of the arts and manners of Europe to the native races.

Manilla.] The largest of the Philippine groupe is called *Lucon Luzon, Suzan, New Castile,* or Manilla. The centre of this island is in 14° 38′ N. lat. and 120° 50′ E. long. It is reckoned by the Spaniards to be 160

Spanish leagues in length, or from N.W. to S.E. and 35 or 40 in breadth. Its situation is extremely favourable in a commercial point of view, being placed between the eastern and western continents; having China on the N., the islands of Japan on the N.E.; the ocean on the E.; the other islands of the Philippine groupe on the S.; and to the W. Malacca, Siam, and Cochin China. Point Calaan, at its southern extremity, is separated from the isle of Samar by a strait of about three leagues broad; and point Cabicunga, at its northern extremity, is distant 80 leagues from the island of Formosa. Manilla is formed by two peninsular masses of land, united by an isthmus three leagues in breadth; the northern of these peninsulas is called *Lucon Proper*, the southern receives the name of *Camarines*. An elevated chain of mountains intersects the whole length of this island, and sends out a number of branches in different directions. The most remarkable points in the chain are: *Arayat*, *Tayabas*, *St Cristoval*, *Labot*, and the volcanic *Abbay* in the S.E. quarter. The general character of this island is volcanic; and very violent earthquakes were experienced here in 1650, 1754, and 1824. The principal rivers are the *Tajo*, on the N., and the *Rio Grande*, the *Chiquito*, and the *Manilla*, on the W. In the centre of the island there is an extensive lake, called *Bay*, in which we find the island of *Talin*. The climate of Manilla is moist; but not so warm as might be expected from its latitude. Hurricanes often commit great devastation; the wet season lasts from June to September, during which period the S. wind blows constantly, and the level country is wholly inundated. The climate is esteemed unhealthy to Europeans, particularly if they visit the island when young; but the natives often live to a great age. The soil of Manilla is exceedingly fertile, and produces cotton, indigo, sugar, rice, tobacco, and coffee, with little labour. Cinnamon, nutmegs, and cloves, are amongst the indigenous productions; and, with a little care, the spices of this island might be made a source of great wealth. Of palm-trees there are said to be no less than 40 species; cocoas are plentiful; and the forests produce ebony and sandal-wood. A great part of the interior of the country is still covered with dense rich forests. Cattle of different kinds are numerous, and in some places run wild; the forests abound in deer. Native iron is found in masses, and there are also several quarries of marble. In short, were this island in the possession of an industrious race of people, and well-governed, it would be one of the most valuable possessions in these quarters. Foreign vessels were formerly burdened with such heavy duties that they amounted almost to a prohibition of commerce, and the only exports were dollars; latterly it has received greater encouragement, and the colonists export indigo, ebony, coffee, pepper, rice, sugar, pearls, cordage, pitch, tar, and rattans. In 1827, the value of importations amounted to 1,048,680 piastres; and of exportations to 1,094,690 piastres; viz.:

	Importations.	Exportations.
34 Spanish vessels,	250,500 pia.	384,991
19 American,	213,030	196,651
7 French,	50,055	132,850
7 English,	106,020	90,944
3 Portuguese,	9,050	21,594
2 Dutch,	5,130	27,711
1 Brazilian,	26,645	5,050
1 Hamburg,	33,765	8,150
9 Chinese junks,	354,485	196,413
1 Danish,		30,306
	1,048,680	1,094,690

The population was recently estimated at 1,376,000 persons, and consists of Spaniards, aboriginal Negroes, Malays, erroneously called Indians by the Spaniards, Chinese, Japanese, Creoles, and Metis. The Spaniards are numerous; Legentil gives a very unfavourable picture of their manners and morals. Both sexes smoke cheroots, a practice which often distorts the mouth, and renders the fairer sex repulsive. The Negroes, of whom the *Aetas* are a principal tribe, reside chiefly in the mountains and impenetrable forests, whither they have been driven by the Malays, and the rapacity of the Spaniards. The Malays are naturally a brave, active, and industrious people; but have lost much of their national character under European domination. One of their principal tribes is the *Tagals* or *Tugalas*, who seem to live in comparative plenty and indolence. The Chinese have been at different times attracted to Manilla in great numbers by its profitable trade. In 1603, the Spaniards, jealous of their commercial wealth and enterprise, massacred 25,000 of them. In 1639, having again increased to the number of 30,000, they dared to take up arms in their own defence, and a contest ensued in which their numbers were reduced to 7000. The same feeling of jealousy prompted the expulsion of these industrious people in 1662, 1709, and 1751 successively; but when the public began to suffer from the want of supplies and trade, the measure was bitterly complained of, and no governor has since renewed the experiment.—The viceroy of Manilla is captain-general of the Philippines; but the military strength did not exceed 1500 men, mostly Mexicans, in 1820; and little discipline exists either in the military or the marine force.—The portion of this island which is occupied by the Spaniards is divided into 15 provinces: viz. *Albay*, *Batangas*, *Bulacan*, *Cagayan*, *Camarines*, *Cavite*, *Laguna*, *Nueva-Eeija*, *Pampanga*, *Pangasinan*, *Tayabas*, *Tondo*, *Valangas*, *Ylocos*, and *Zambales*.—*Manilla* is the metropolis not only of this island, but of all the Spanish East Indian possessions. It is situated upon a large bay, on the S.E. side of the island, at the mouth of a river to which it gives its name. The environs have a pleasing appearance, though there is little cultivation. The population was estimated in 1820 at between 36,000 and 38,000 souls, of whom not more than 1200 are European Spaniards. Their habits are indolent and luxurious. Murders frequently occur here; one anonymous writer in the Calcutta Journal declares that when he visited Manilla in 1820, there were 3,000 prisoners in the jails, and a considerable number of them charged with homicide.

THE BISSAY ISLANDS.] All the islands situated between Manilla and Mindanao go under the general appellation of the Bissay islands. Of these *Zebu* is the most fertile and populous.

THE CALAMIANES.] S.W. from Mindoro, between that island and Palawan, is the groupe called the Calamianes, or the Cane Islands. The chain by which these islands are formed goes off from Manilla in a S.W. direction. It seems to be very high and very narrow. The two principal islands are *Busvagon* and *Calamian*. The population of the groupe is about 16,000 souls. The Spaniards have occupied a few positions on the coasts; but the inhabitants of the interior maintain their independence. The chief productions of these islands are: rice, ebony, canes, wax, gums, pearls, fish, and turtles.

MINDANAO.] The island of Mindanao, the most southerly of the Philippines, if we except a few very trifling islets, ranks the second in size and importance. It lies between 5° 30′ and 9° 40′ N. lat.; and 121° 40′ and

126° E. long. Its length from N. to S. is 250 miles, and its circumference about 830. Like Manilla it is formed of two peninsular masses, of which the eastern is the larger. The coast line is extremely irregular; pools and rivulets occur at every step in the interior; and there are above 20 navigable rivers, the principal of which are the *Pelandji*, the *Batican*, and the *Sibaguey*. There are also several large lakes; the most extensive is the *Mindanao* or *Mandango*, in the S.E.—This island produces rice, potatoes, sago, cinnamon, and all kinds of tropical fruits; but the cinnamon is inferior to that of Ceylon. It is not certain whether or not this island contains mines; but gold and sulphur have been found, and great quantities of talc exist in it; millstones are also exported from it. Cattle are very numerous; their numbers not being kept down either by man or wild beasts. Scorpions, vipers, and centipedes, are numerous.—A great part of this island is governed by native chiefs, who are styled *rajahs;* the nobles are called *latoo.* The inhabitants of the interior have been represented as a race of fierce black savages, called *Haraforas*, or *Papooas;* those of the coast have a great resemblance to the Borneans, and Macassars, and are evidently a Malay race. They are divided into *Mindanaos*, and *Illanos;* the former of whom are governed by one sultan, who is the most powerful prince in the island; the latter have about 17 rajahs, who form a kind of confederacy among themselves. They are all Mahommedans, and have imans who teach their children to read and write. Many of them are addicted to piracy; their vessels carry small guns, and from 70 to 80 men. They also carry on a trade with Hindostan, and chiefly with Surat. Their intercourse with Europeans has given them a knowledge of several arts. They are a fierce and vindictive race, fond of show and cruel sports, but lively and intelligent.—The Spaniards have formed settlements on the coast, which are divided into the three alcaids of *Samboango* on the S.W., *Mesamis* on the N., and *Caraga* on the E. The population of these colonies is estimated at 51,000 persons; but the total population of the island exceeds 1,000,000.—The Dutch visited this island in 1607, 1616, and 1627, and sent an embassy to the sultan in 1689, requesting permission to build a fort, which was refused.

SOOLOO.] The island of *Sooloo* or *Suluk* lies to the S.W. of Mindanao. Great quantities of ambergrease are cast upon its shores towards the end of the western monsoons; yet it is curious that this substance is seldom or never found on the coast of Mindanao. Sooloo derives its chief wealth, however, from the pearl fishery which takes place during the calm which succeeds the western monsoons, while the sea is so smooth and clear that the eye can discern objects under water to the depth of 40 or 50 feet. The sultan of Sooloo has a small fleet, and holds several neighbouring islands. *Bowan*, his capital, is situated on the N.W. part of the island, and has a population of 6000 souls.

Authorities.] Comyn's State of the Philippine Islands. Lond. 1821, 8vo.—F. R. St Croix, Voyage Commercial. Paris, 1810, 3 vols. 8vo.—Historia de la provincia de Filippinas por al Padre, R. M. Villarde. Manilla, 1749, fol.—Maver's Historical View of the Philippine Islands, etc. Lond. 1815, 8vo.—The Works and Travels of Zuniga, Sonnerat, Leyden, Marsden, Peyrouse, Forest, etc.—Carte reduite des isles Philippines par Bettin. Paris.—Dalrymple's Chart. Lond. 1790.—Mapa de las islas Filippinas. By Alman. Lond. 1821.

CHAP. IV.—BORNEO.

To the N. of Java, and the S.W. of the Philippine islands, is the island of Borneo, which, if we except New Holland, and New Guinea, is the largest island in the world. It is situated between 6° N. lat. and 4° 20′ S. lat., and 109° 5′ and 119° 20′ E. long. Its superficial extent is estimated by Stein at 9,893 German or 212,699 English square miles, and by French geographers at 40,000 square leagues of 25 to a degree. The name of *Borneo* is correctly pronounced by the natives *Brunai*, and is, to all appearance, a primitive and indigenous word: for there is no reason to think that Leyden's conjecture, that Borneo is a corruption of *Varani*, that is 'sea-born,' a Sanscrit epithet—as if the people or natives Borneo spoke a corrupt dialect of Sanscrit—is at all correct. The name of Brunai, or, as pronounced by Europeans, Borneo, strictly belongs to the Malay state of Borneo in the western part of the island; and, as is frequently done in similar cases, has been applied by us to the whole island. A complete proof that Dr Leyden's conjectural etymon of Borneo, from Varani, is false, is the fact that none of the natives are of the Hindoo stock; but are apparently an original race, except those of the Malay stock.

History.] The natives call the island *Dayaka Varuni*, and affirm that it anciently formed a part of the Chinese empire. The companions of Magellan saw it in 1521, and called it *Bunne*. The Portuguese bestowed upon it the name by which it is now known in European geography, in 1530. Several European nations have attempted to form settlements on the coast of Borneo, but hitherto with little success. The Dutch, however, erected a factory at Pontiana, in 1643; and, in 1748, they compelled the prince of Tatas to grant them the exclusive privilege of the pepper trade in his dominions. In consequence of the treaty then negotiated, the Dutch company still carry on a commercial intercourse with this country, but, it is believed, with very little profit. In 1706, the English were allowed to build a factory at Banjermassin; but their imprudent conduct procured their speedy expulsion. In 1773, they formed an establishment on the island of Balambangan off the northern coast of Borneo, which has proved equally unsuccessful. The Dutch government of Java are at present in possession of the most of the western coast of Borneo, and have united their posts there under the name of the residency of the W. coast of Borneo. These acquisitions have been made by treaties made with the native princes since 1818. The general principle of these treaties is, that in consideration of the posts being placed under the immediate control of the Netherlands company, and of the sultans of Sambas, Monepawa, Pontianak, and Matan, not negotiating with other European governments or Americans, and using their endeavours to repress piracy, these princes shall be paid a monthly salary by the Dutch. The nature of those which have been conducted with the Daya chieftains of the interior of the island is, that their territories shall be administered by the Dutch, and the revenues equally divided. A rough map of the extent of the Dutch residency has been constructed principally from the observations of Mr Muller, assisted by those of other gentlemen who have travelled in various directions. By this map it appears that the residency extends over nearly one-third of the whole island.

Physical Features, &c.] Borneo exhibits the usual insular structure—a mass of lofty mountains in the centre, sloping gradually down to level and alluvial tracts along the shore. The principal chain of mountains must extend N. and S. not far from the E. coast. It is watered by many fine rivers,

of which those best known to Europeans are the *Borneo*, the *Banjari* or *Bander*, and the *Sukadana* and *Pontiana*, which are all navigable, by boats, for more than 50 miles above their junction with the sea. It is probable they arise from a marshy table-land of great elevation in the mountainous district. The interior is covered with immense forests filled with wild animals, particularly orang-outangs; but no European has yet explored this region. A great part of the coast, for a breadth of 15 or 20 miles, is marshy, exhibiting in scattered patches the exuberance of tropical fertility. Inland is the lake of *Danao Malayu* in 1° 5′ N. lat. and 114° 20′ E. long. It was first visited by Europeans in 1823. It is 8 leagues by 4 broad, in some places 18 feet deep, and its dimensions are considerably increased in the rainy season. Two islands rise above the surface of its waters, and it is stored with numerous fish. The larger island is called *Vander Capellen*, and the lesser *Tobias*. This island has been often devastated by volcanoes and earthquakes. At Sukadana the thermometer is very seldom under 82° or above 94°. The sea and mountain breezes, and the rains, which are constant from November till May on the western coast, considerably freshen the atmosphere.

Productions.] Borneo produces rice, sago, black pepper, camphor, honey, cotton, cloves, dye-woods, sandal-wood, ebony, gold, iron, tin, copper, diamonds, and antimony. The diamond-mines are confined to the W. and S. coasts, being principally situated in the territories of Pontiana and Bangermassin. The resident Bugis are the great dealers in diamonds. The rajah of Mastan is in possession of one of the largest diamonds known to exist. It was obtained about 100 years ago from the mine at Landak, and weighs 367 carats gross. Its estimated value is £269,377. Previous to 1818, when the Dutch seized this coast, upwards of 32,000 Chinese were employed in the gold mines at Mantradu, and the western parts of Borneo. Valuing the yearly produce extracted at 72 dollars each man, the sum total would amount to 2,224,000 dollars annually, or £556,000. But taking the medium quantity at 117 dollars per man, the sum total would be 3,744,000 dollars, or £936,000. In 1812, it was estimated that the annual amount of these mines amounted to 4,744,000 dollars, or £1,186,000, valuing the dollars at 5s. each. The sum annually remitted by these industrious emigrants to China was £500,000, and about one-half of that was remitted to Bengal and the western part of India, and the surplus went to Java. But as a just punishment of Dutch avarice, the government of Java now suffers a monthly loss of 34,000 gulders in supporting the residency of the W. coast of Borneo. The camphor of Borneo is excellent; it is obtained from the *Daobalanops camphora* of Colebrooke —a different tree from the *Laurus* camphora, and found only in Sumatra and Borneo. The Borneo camphor, however, sells for £500 per quintal, while that of Sumatra is usually valued at £330. Benzoin, the resin of a species of styrax, is largely exported. Antimony has been found in masses, or rather mountains, and the exportation of this article has prodigiously increased of late years. It is in Borneo that the largest of the monkey-tribe, the *pongo*, is found. Wild buffaloes, boars, tigers, and elephants abound; and the species of birds are innumerable.

Population.] The population of Borneo has been estimated—we suppose above the truth—at 3,000,000. The interior is entirely occupied by a native race, bearing the general name of *Dayaks*, but variously named according to the parts of the island which they inhabit, and nearly similar in character to those who occupy the interior of Sumatra. Some cultivate

the ground,—others display considerable industry in fishing,—and a few employ themselves in collecting gold,—but their institutions in general indicate the rudest state of human society. In personal appearance they are decidedly superior to the Malays, and their women are rather good-looking. Polygamy is not practised. It has been reported that they devour the flesh of their enemies—an assertion probably in this, as in many instances, without foundation. All accounts agree, however, as to another truly savage custom, by which every man is debarred from the privilege of matrimony until he has with his own hand cut off the head of an enemy. Those who are desirous of entering into this state, form themselves into what Dr Leyden calls 'head-hunting expeditions,' and make an inroad into the territories of a neighbouring tribe; if their strength appears sufficient, they endeavour to effect their objects by force; if otherwise, they conceal themselves behind thickets till an unfortunate individual passes, whom they can make their prey. When a married woman dies, her husband is not allowed to take a second wife until he has slain an enemy in battle, and offered his head in sacrifice to the manes of his deceased wife. Some are also said to immolate human victims on the altars of their divinities. The inhabitants of the towns along the coast consist chiefly of Malays and Chinese. The number of the latter has been estimated, by a recent writer in the Singapore Chronicle, at 125,000 souls. There is another race called *Papons*, or *Negrillos*, who reside in the most inaccessible parts of the island, and have no intercourse with the surrounding population.

STATES.] Borneo is divided into a great number of independent states, whose chiefs, being musselmen, assume the title of rajah or sultan. Of these the states of *Banjarmassin*, *Succadana*, *Sambas*, and *Borneo*, are the principal.

Borneo Proper.] This state has a sea-coast of more than 700 miles in extent, by a depth of from 100 to 150 miles. It has the Dutch residency on the W., the boundary in this direction being Tanjong Data, in 3° N. lat. and 110° 36′ E. long.; on the E. it has the Bornean territories of the state of Suluk; the mouth of the Sandakan river, in 5° 50′ N. lat. and 118° 15′ E. long., being the frontier. On the S. it has various savage tribes, as the Dayan, Dusum, Mureet, and Tataos, men who take a pleasure in decapitating strangers, and glory in hoarding their skulls, which are handed down to posterity as heir-looms of the family, and trophies of hereditary renown. To the state of Borneo belong the islands of Malaweli, Banggi, Balambang, twice a British settlement, Balabak, and Babullan, containing several fine harbours, favourably situated for the trade of China, the Philippines, and their own vicinity. Borneo contains a number of fine rivers, the most important of which are those of Rayung and Batavia, which lead to Sibita, the capital of the Kayan, the most powerful, idolatrous, and uncivilized tribe of the whole island. Mahari, like the two last on the N. coast, that of Borneo, properly so called, navigable for 20 miles for vessels of 300 tons; and Sandakan, or China Batangan, on the N.E. coast of the island. The interior of the Bornean territory is filled by extensive chains of high mountains, the most elevated of which is Keeneebalu, in 6° N. lat., and visible from both sides of the island, which here runs out into a sort of peninsula. The western districts, as Sarawak and Kasinlaka, between 2° and 3° N. lat., abound in metals, as gold, zinc, and antimony. Though land animals abound, yet it is curious that the elephant, the rhinoceros, and a species of leopard, (but not the royal tiger,) exist only in a corner of this vast island, its northern peninsular extremity, in

the districts of Ungsang and Paitna, they are nowhere to be found in any part of the archipelago, to the eastward of this. Like all countries in a rude and unimproved state, the Bornean territory is inhabited, or rather infested, by numerous barbarous tribes, differing from each other in language, and ever in a state of hostility. The principal tribes inhabiting the country are 16 in number, of which the Malays are the chief, the most powerful, and the most civilized. The Pagan tribes closely resemble each other in manners and customs, and in one thing the most of them agree—in cutting off human heads and hoarding skulls. Savage, however, as they are, they are not, in some respects, in the lowest scale of social life, as they have almost all some knowledge of agriculture, cultivating rice and farinaceous roots and pulse. None of them are huntsmen, nor wretches living on wild roots or raw oysters. In religious feelings the Bornean savages are eminently deficient, as they have no apparent system of religious belief, have neither gods nor idols, nor temples nor priests. Yet they are very superstitious, very attentive to good or bad omens, and especially to the cry of birds. None of them have any knowledge of an alphabet, or any other way, by visible signs, of permanently recording their ideas. This is somewhat singular, as all the great islands have each one or more alphabets. This may be owing to the primitive sterility of a country rich in minerals, but without foreign intercourse with people more civilized than themselves, and the difficulty of communication with a coast which has no large openings into the interior by means of bays, indentations, or large aestuaries, but is throughout a compact and unbroken shore. The sultan of Borneo is a Malay prince whose Malay subjects do not constitute one-tenth of the population, even including the tribes converted to the faith of the Koran. Like the other Malayan races, they seem to have come from the interior of Sumatra, to the W. coast of Borneo, and thence to the N. coast; and this is an event of no great antiquity; for it took place 29 Bornean reigns since, or 580 years ago, estimating each reign at 20 years on an average, and the Borneans had not even adopted the Mohammedan creed at their first migration. The government is like that of other Malay states, hereditary and despotic. The radah or sultaun has a council of four ministers, the treasurer, the general, the chief justice, and the minister properly so called, and are denominated the pillars of the state. Under these are two subordinate great officers, the second minister, and a deputy-general. The affairs of trade are managed by four inferior chiefs, of whom the principal are the intendant of the port and the warehouse-keeper, which latter was sent as an envoy to Sincapore in 1825, from the king, to open up a commercial correspondence with the British government. There are in Borneo 30 or 40 pangeraus, or hereditary governors, rendering the government a sort of aristocracy. Borneo city is seated 15 miles up the river, in 5° N. lat., and is built on the banks within high-water mark, in a good measure resembling Venice, each house being raised on posts from one to two fathoms in height, and connected with the neighbouring house by a single plank. The fortification alone is built on dry land. It had a considerable commerce with China till about 15 years since, and the annual emigration of Chinese to it was great, but it is now, or very lately, reduced to 500 emigrants, from the anarchy which then prevailed. The most considerable trade the Borneans have at present is with the port of Sincapore, which was, in 1826, visited by 40 vessels from the ports of Borneo Proper. The present monarch of Borneo is said to be a liberal and enlightened prince, the best that ever filled a Bornean throne, one who loves justice

and hates oppression, speaks Chinese fluently, and settles all disputes in person between his Malay and Chinese subjects, which has had the best effect, and terminated those feuds formerly so frequent. Pepper, antimony, bees-wax, and seed-pearl, are principally exported to Sincapore. The pepper is all the produce of Chinese industry, these people being the sole cultivators. By means of Borneo an intermediate commerce may be carried on with those provinces of China with which no European nation has ever had direct communication, and may eventually be of great advantage to the British commercial interest.

State of Sambas.] The town of Sambas is situated about 30 miles up the river of the same name. Like most other towns in Borneo, it is built of timber and bamboos, and raised by stakes above the swampy foundation. Sambas has been always a powerful state, devoting itself so entirely to piracy as to render its existence scarcely compatible with that of its civilized neighbours. On this account the British, in 1813, undertook an expedition against it; carried the fort by storm, and obliged the rajah to retire into the interior of his dominions. A number of small villages are scattered over the face of the country betwixt Borneo and Sambas.

State of Passir.] The chief state on the eastern coast is Passir, situated on a river of the same name. This district is low and flat, marshy, woody, and extremely unhealthy. The inhabitants have a very bad character.

States of Banjarmassin, &c.] Banjarmassin is the principal state on the southern coast; it too owes its prosperity to a large river, on the banks of which it is situated. Ships may anchor near the mouth of the river, in the port of *Tombangou*, or *Tombornio*, where they are well-supplied with water and provisions. The population of Banjermassin is chiefly Javanese, with a considerable proportion of Bugis, Macassars, and Malays. The Chinese are also pretty numerous. The sultan resides at *Mortapara*, about three days' journey up the river. The district of Banjar produces gold and diamonds; pepper is abundant, and may be considered the staple commodity. The iron is very excellent, and peculiarly fit for making steel; but the inhabitants themselves do not understand the art of manufacturing it. On the eastern coast, *Mangedava* and *Pappul* are populous, fertile, and well-watered districts.—*Malloodoo* possesses these advantages in a still higher degree.—Tiroon produces sago in abundance, and edible birds' nests more copiously than any other part of the Eastern archipelago.

States of Succadana, &c.] Succadana was anciently the most powerful state on the western coast. The Dutch began to trade here in 1604; but it is now entirely in the hands of the Malays, and seldom visited by Europeans.—Pontiana is a state of recent origin, though it now exceeds in wealth and power—or at least did so until the recent Dutch expedition—all others on the western coast. This distinction it owes to the wisdom of the Arab prince by whom it was founded. He renounced the pernicious policy—almost universal in these petty states—of embarking in trade, and monopolizing its principal articles, but confined himself to his proper functions, of dispensing justice and securing protection to all who resorted to his dominions. Under this salutary policy, the town of Pontiana soon rose to be the greatest emporium in these seas. It is situated on a large river, formerly called *Lana.*—*Mompariva*, situated a little to the N. of Pontiana, is the best market for opium upon the coast. The city lies 19 miles up the river.

Authorities.] Beckmann's Voyage, 8vo., Lond., 1788.—Valentyn Beschryving van Borneo.—Raffles' Account.—Sonnerat's Notices.—A Mr

Muller was lately employed by the Dutch government to survey this island, but he was murdered by the natives, and his journals have not yet been published.

CHAP. V.—CELEBES AND THE MOLUCCAS.

The islands situated to the east of Borneo and Java, and to the south of the Philippines, and extending to the immediate neighbourhood of New Guinea, are called by the French geographers the *Moluccas*, or Spice Islands. More divided and irregular than the Sunda Islands, they also contain a greater number of volcanoes. Trees, bearing more or less exquisite spices, seem to be diffused over the whole of them. The king of Ternate possesses the whole N. coast of Celebes; and the governments of Macassar and Banda share with each other the Timoorian chain. The Dutch of Batavia comprehend all these countries under the general name of *De Groote Oost*, or 'the Great East.'

The largest of these islands is *Celebes*, separated from Borneo on the W. by the strait of Macassar, and from the Moluccas, properly so called, on the E., by the Mo ucca passage. That portion of the sea on the N. which lies betwixt this island and Mindanao, is sometimes called the sea of Celebes, sometimes the Mindanao sea. The figure of Celebes is extremely irregular. Its superficies, according to Crawford, amounts to nearly 55,000 British square miles. The bays of *Boni*, of *Tolo*, and, most of all, that of *Tomini* or *Gunong-Tellu*, divide it into a number of peninsulas. The more our maps have been improved in correctness, the more ragged and skeleton-like does this island appear. It may be compared, says Malte Brun, to a star-fish from which the radiating limbs on that side which lies to the W. have been removed: and it is remarkable that the smaller island of *Gilolo*, adjoining to it on the E., has the very same singular form. The numerous gulfs confer on this island the advantage of a temperature mild for its equatorial situation, the heat being moderated by the copious rains and the cooling winds. The eastern monsoon lasts from May to November; the opposite one prevails through the rest of the year. The tides here are extremely irregular. Celebes contains several volcanoes in a state of activity. The bold, broken, and verdant coasts, present some charming landscapes. Numerous rivers fall in broken cascades at the feet of immense rocks, in the midst of majestic groups of picturesque trees. The most poisonous of known vegetables grow in this island. The famous *upas*, the existence of which in Java has given occasion to so many fables, grows also here; and the Macassars dip their arrows in its juice. Here also grow the clove and nutmeg-trees, which the Dutch so avariciously engross, the ebony, the sandal, the calambac, the valuable woods of which are articles of export, the sago tree, the pith of which is used as an aliment by so many nations, the bread-fruit, and other fruit-bearing species. Rice and cotton are abundant. No elephants or tigers are seen in the forests, but many deer, boars, and, according to some accounts, elks or antelopes. There is an infinity of monkeys of a very strong and very mischievous kind; and there is a large species of serpent, by which many of them are devoured. The cattle of Celebes are small, and have a hump on the back. The island also produces buffaloes, goats, and sheep, which are remarkably lively and sure-footed, being well accustomed to the mountain roads. Besides the fishes common to the seas of Celebes, with others in the same regions, we may remark that large quantities of turtle are taken

on the eastern coast, for the sake of the tortoise shell, which is here a valuable article of commerce. The northern peninsula, from the isthmus to the district of Boolan and beyond it, is full of gold mines. Those of the district of Ankahooloo, near the Dutch settlement of Gorontala, yield gold of 21 carats; that found in the others is of 18. The best known place in the island is Macassar, a fortified town in possession of the Dutch. It is situated in the S.W., on a point of land watered by two rivers. One of these rivers is broad, and allows a vessel to sail up within half-cannon-shot of the town walls. *Bonthain* is also in the south, on the bay to which it gives its name. It has a Dutch fortress immediately adjoining it. The bay of Bonthain is large, and affords safe anchorage during both monsoons. The city of Boni is at a short distance from a lake which goes by the classical name of *Tempé*, and gives rise to a fine river. The northern provinces, the capital of which is *Maros*, supply the whole island with rice. They contain 370 large villages, occupying the plains on the W. coast. Beyond the gulf of Kaieli the territory of the king of *Ternate* begins, comprehending the whole northern and eastern shores, as far as the gulf of Tomini, and extending a considerable way along the shores of this gulf. This territory, which is able to furnish 17,000 soldiers, is divided among a number of vassal princes. The district which the Dutch call *Paloo*, a flat and fertile territory, is the *Parlow* of captain Woodward. *Tolatola*, a large town, according to an English traveller, is the *Tontoly* of the Dutch. *Magondo* and *Boolan* are the largest states. Near Manado is *Fort Amsterdam*. On the gulf of Tomini the Dutch have the settlement of *Gorontalu*, in a country which abounds in buffaloes, in iron-wood, and in rattans, and where the nights are rendered very chill by the air of the mountains. The *Tomitans* occupy the central part of the island where the gulfs terminate. *Tambooko*, and a part of the eastern coast, are possessed by the *Badshoos*, a savage race, who spend a greater proportion of their time in their fishing-boats than on land. The inhabitants of Celebes, who are distinguished into *Booghiese*, or *Bugis*, and *Macassars*, are a vigorous and high-minded people. Their law allows any individual to revenge a blow by the death of the person who inflicts it, provided he takes this revenge within three days. Among the more scrupulous, even a haughty manner will not be tolerated. The practice of running a muck, which is common in all the surrounding islands, is particularly frequent in this island. A person who has suffered a severe affront, especially if his life or honour is in danger, and he is laid under restraint or captivity, if any weapon is within his reach, lays hold of it without the slightest warning; sometimes with a hideous shout, immediately stabs those nearest to him, and, running about with an infuriated look, deals death among friends and foes indiscriminately, till he is himself put to death by some person, who thus performs an important service to society. The officers of police are furnished with three-pronged forks, for the purpose of overpowering persons in this unfortunate and desperate condition.

Religion.] The ancient natives of this island worshipped the sun and moon, and some local deities. They built no temples, deeming the canopy of heaven the only temple corresponding in magnificence to the leading objects of their sacrifices and devotions. The influence of Hindooism existed but in a very limited degree. The Mahommedan faith has now been established in the island for two centuries, and its priesthood possesses an extensive influence.

Sanghir, &c.] On the N.E. a chain of islands extends between Celebes

and the S.E. point of Mindanao. The principal one is called *Sanghir*, which is said to be fertile and populous. It is occupied by a Dutch post. —The island *Siao*, and the *Talautzi* group, form a chain along with Sanghir. These islands are rich in sago and oil of cocoa, and were said a century ago to contain 28,768 inhabitants. They contain two or three tremendous volcanoes. On the S. coast of Celebes we find the islands of *Salayer*, and *Butung*. The latter forms a separate kingdom or sultanate. The capital of Butung is a fortified city. The inhabitants manufacture cotton stuffs, and make cloth of the fibre of *agave*. Its extensive forests swarm with parroquets and cuckatoos. A species of nutmeg tree grows here, called by naturalists *Myristica microcarpa*, or *uviformis*, from the fruit being of small size and in clusters like the grape. Much of the ground is overrun with rattans, which climb trees, then trail along the ground, and climb other trees in a long succession. The fruit of the *Bombax cliba*, or silky cotton, supplies the monkeys with abundance of food.

THE MOLUCCAS.] The Moluccas according to the original and proper application of the term, consist of five small islands to the W. of Gilolo, viz. *Ternati*, *Tidore*, *Motir*, *Makian*, and *Bakian*, or *Bachian*. But the sovereigns of the Moluccas had possessions in *Gilolo*, *Ceram*, and other islands in the neighbourhood, and these are called the *Great Moluccas*. The name seems to be of Arabic derivation, signifying 'Royal Islands,' because they were the places of residence of the sovereigns of the adjoining islands.

Volcanoes.] The archipelago of the Moluccas bears the most evident marks of a country overturned by one of those physical revolutions which naturalists call *debacles;* containing islands broken and indented in a singular manner; enormous peaks, projecting abruptly from the surface of the deep rocks, piled up to immense elevations, and a great number of volcanoes, some of which are in a state of activity and others extinguished. The earthquakes, which in these regions are frequent and dreadful, render the navigation dangerous; for not a year passes without the formation of new sand-banks, and the disappearance of old ones.

Climate and plants.] The heat attended with excessive moisture, followed by long droughts, and the nature of the soil, which is a spongy rock, prevent the cultivation of the *cerealia*. The pith of the sago-tree serves for bread to the natives. The bread-fruit tree, the cocoa, and all the fruit-trees of India, succeed in the islands. The *Pterocarpus draco*, or lingoa, is a native of these islands, and is used as a substitute for the teak. It is also cultivated for its fragrant blossoms, which are much esteemed. The wood of some of its varieties is highly perfumed. Though less hard and durable than teak, it is handsomer, and therefore fitter for cabinet work. The enormous excrescences which grow on it are wrought into beautiful articles, equalling in lustre the finest variegated marble. The spice trees, however, are the objects by which the avarice of Europeans has been principally attracted to this part of the world.

The Clove.] The clove tree, (now called by botanists *Eugenia caryophyllatta*,) is about forty or fifty feet high, with long pointed leaves like those of the laurel. Some compare its appearance to that of the beech. At the beginning of the wet season in May it throws out a profusion of leaves. Soon after the germs of the fruit are to be seen at the extremities of the shoots, and in four months the cloves are fully formed. The fruit, at first of a green colour, assumes in time a pale yellow, and then a blood red. At this period it is fit to be used as a spice, consequently this

is the clove harvest. But to ripen sufficiently for the purposes of propagation, it requires three weeks longer; in which period it swells to an extraordinary size, loses much of its spicy quality, and contains a hard nucleus like the seed of the bay. It is now called 'the Mother Clove.' There are five varieties of this fruit. It has a more limited geographical distribution than any other useful plant. It was originally confined to the five Molucca islands, and chiefly to Makian. It had been conveyed to Amboyna a very short time before the arrival of the Portuguese. Not partial to large islands, it does not grow well in Gilolo, Ceram, Booro, or Celebes. It has been cultivated, and has produced fruit, in the western part of Oceanica. It has also borne fruit, though of inferior quality, for these fifty years in the Mauritius. Even at Amboyna the tree is not productive before the tenth or twelfth year of its growth, and requires great attention; whereas in the parent islands it bears in its seventh or eighth year, and requires very little care or culture. It neither thrives near the sea nor on the high hills. The gathering, the drying, and the packing of it, are all as simple operations as possible; and very little care is required for its preservation as an article of commerce.

The Nutmeg.] The other valuable species is the *Myristica Moschata*, or nutmeg tree; which, in its general appearance, resembles the clove tree, only it is less pointed at the top, and its branches are more spreading. Its leaves are similar to those of the pear tree, but larger, and, like all those of the nut tribe, dark green on the upper surface and grey beneath. After small white flowers, it produces a fruit very similar, in form and colour, to a nectarine. When ripe it resembles a ripe peach, and, bursting at the furrow, discovers the nutmeg with its reticulated coat, the mace, of a fine crimson colour. The external pulpy covering has an austere astringent taste. Within the mace is the nutmeg, inclosed in a thin shell of a glossy black, and easily broken. It has eight varieties, which appear to be permanent. The limits of its geographical distribution are much wider than those of the clove. It grows in New Holland, in the south of India, and in Cochin-China; but in these countries it is void of flavour; and for all useful purposes its geographical limits are nearly as narrow as those of the clove, and indeed almost exactly the same. The cultivation of the nutmeg is nice and difficult. The best trees are those produced by the seeds voided by a blue pigeon, called the nutmeg bird, by the excrement of which its growth is much facilitated.

In this part of the world there are several minor spicy productions which are found in no other country; viz. Massoy bark, used for culinary purposes by the Malays and Javanese, and of late in request in China and Japan. The *Laurus Culitlawan* also yields an aromatic bark. The leaf of the *Melaleuca leucodendron*, or cajeput tree, is well known to yield a fragrant essential oil.

Historical Notices, &c.] The natives of the Moluccas, before they were visited by foreign nations, attached no value to the vegetable riches which are peculiar to their islands, and which have rendered them at once so celebrated and so unfortunate. The Chinese first accidentally landed in the middle age, and discovered the clove and the nutmeg, in consequence of which a taste for these commodities was diffused over India, and thence extended to Persia and to Europe. The active Arabians, who then engrossed almost all the commerce of the world, turned their attention to the native country of these precious commodities, and repaired to it in numbers; when the Portuguese, who always followed close behind, wrest-

ed the treasures from that nation. In 1521, Antonio de Brito first appeared in force in the Moluccas, for the express purpose of taking possession of them in the name of the king of Portugal. The unsuspecting sovereigns received their treacherous guests with caresses, but soon found cause to entertain very different sentiments towards them. One of the first acts of the commander was to imprison some of the followers of Magellan, who had been left in this part of the world, because they belonged to the hostile nation of Spain. A system of violence, intrigue, and perfidy towards the natives was immediately begun and continued for sixty years, with the single exception of the two years of the government of the virtuous Galvan. At the end of that period the Dutch, with the assistance of the natives, drove out the Portuguese; but they soon discovered a rapacious policy equally oppressive. In 1606 the king of Ternati attempted to league the different princes for their expulsion, but the jealousies of his neighbours defeated his intentions. In 1613 the intrigues of the Dutch procured for them, from the native princes, an exclusive right of buying cloves. Every infraction of these iniquitous compacts was resented; and from this cause the country was now desolated for seventy years with wars and invasions. The natives displayed much bravery, but were finally subdued. The Portuguese and English sometimes interfered, and their policy wavered according to the prospects which events at different times held out to their base avarice. The English were allowed at one time to have a mercantile establishment at Amboyna, when held by the Dutch. But the latter, in the year 1623, after forcing some Chinese and Javanese soldiers, by the torture, to make confession of a plot on the part of the English, seized on the whole of the English residents, and put them to death with circumstances of indignity and cruelty sufficient to disgrace any barbarians. In this unfortunate island Governor Vlaming, one of the most detestable monsters that even colonial depravity can boast of, carried on a scene of bloody executions, putting to death people, nobles, and priests, by dozens, in all the different forms of cruel death; strangling, breaking on the wheel, drowning in the sea, and beating to death with bludgeons. Those who were taken prisoners, and those who surrendered under promise of pardon, shared the same fate. It was not till 1680 that the Dutch, by completely crushing the natives, carried the principles of their commercial policy into rigid practice.

Spice Trade.] While the culture of cinnamon was confined to Ceylon, that of the clove was confined to Amboyna, and that of the nutmeg to the Banda islands. It was not till 1778, when the plantations at Banda were greatly damaged by an earthquake, that the Company allowed the nutmeg, as well as the clove, to be cultivated in Amboyna. In consequence of this monopoly of cloves and nutmegs, the quantity produced is greatly diminished, and the price enhanced. The particulars of this department of mercantile history are given in detail in the enlightened work of Mr Crawfurd, and the inferences are luminously drawn, pointing out the ruinous tendency of all those cruel and unjust measures. The price given for cloves to the cultivator is $3\frac{1}{4}$d. per lb. avoirdupois, nearly eight dollars per picul of $133\frac{1}{3}$ lbs. When the trade was conducted by the natives, it even sold in Java at an average of 14 dollars per picul. When the article arrived by a difficult and hazardous land-carriage to the Caspian Sea, it cost 91 dollars; at Aleppo 141; and in England 237. Since the close monopoly of the Dutch, *i. e.* since 1623, the price paid for cloves to the Dutch on the spot has been eight times the price paid by them to the cultivator.

When brought directly to England, they are sold at an advance of 1258 per cent. on the natural export price. Concerning the quantities produced, our information is not exact. During the Portuguese and Spanish supremacy, the five Moluccas produced annually 2,376,000 lbs. When the trade was free, the quantity was one half more. The whole produce at present does not exceed 700,000 lbs. Before the last time that the islands fell into the hands of the English, Europe consumed annually 553,000 lbs; since that time about 365,000. The duty imposed in England was then more than twenty-fold the price of the commodity where it grows. The price indeed fell, but not in proportion to that of pepper, and other analogous articles. The quantity now consumed in England exceeds that consumed in 1615 by 56 per cent.; but, if the trade had been free, it ought in the present state of wealth and luxury to have increased in the proportion of 147 per cent. that being the case with pepper. The Dutch monopoly has occasioned a cultivation of cloves in Bourbon and Cayenne, which would immediately cease if the Molucca trade were laid open, the produce being so much inferior. The same principles operate on the trade in nutmegs. In the ancient commerce, down to the establishment of the monopoly, nutmegs were always sold and transported in the shell, and the natives, when left to themselves, are still disposed to continue that practice. The Dutch, to secure their monopoly more effectually, subject them to processes which destroy the powers of germination, consisting in slow kiln-drying and smoking for three months, and immersion in quick-lime and salt water, with drying, which require two months longer. This process is attended, not only with loss of time and labour, but with great waste, and other inconveniences. The kernel is exposed by it to the depredations of the nutmeg fly. It is estimated that a tenth part of the produce perishes in consequence of the separation of the shell. The English, when they conquered the Spice Islands in 1810, found in store more than 37,000 lbs. of bad, broken, and rotten nutmegs. The natural price of the article ought not to exceed four dollars per picul, or 2½d. per pound, and in Europe the pound should not exceed 6d. but it is in general twelve times that price; and in England, duties included, seventeen times as much. Mr Crawfurd, while he details these, among other important circumstances, observes, that "the consumer pays this price for no other purpose than that a political juggle may be played, by which the party who plays it imposes on itself, without gaining any advantage whatever, while the grower is cheated out of his property and out of his liberty." The consumption of nutmegs, as well as cloves, in Europe, is smaller at the present day than in the middle ages. Black pepper and ginger have in a great measure taken their place, and, above all, the pimento and Chili commodities, unknown to Europe before the discovery of America, and of the route by the Cape of Good Hope. The following is the state of the nutmeg trade at different periods.

	lbs.
Consumption of nutmegs in all Europe in 1615,	400,000
Do. of mace in do.	150,000
Consumption of nutmegs in England in 1615,	100,000
Do. of mace	15,000
When the monopoly first fell into the hands of the English in 1796, the consumption of nutmegs in Europe was	85,960
And of mace,	24,234
Consumption of nutmegs in England,	39,071
Of mace	5,400

	lbs.
When the monopoly was last in the hands of the English, in 1811, the consumption of nutmegs in Europe was -	214,720
Of mace, - - - - - - - -	250,040
Consumption of nutmegs in England, - - - -	56,960
Of mace, - - - - - - -	3,620

BANDA ISLANDS AND RESIDENCY.] To the S.E. of the island of Amboyna, between 3° 50′ and 4° 40′ S. lat., is a small and distinct volcanic groupe of 10 isles, taking the name of *Banda* from the principal island, *Banda-Lantor*. These are all subject to frequent earthquakes. Their climate is considered unhealthy by strangers. The island of Banda is mountainous, and an impenetrable bamboo forest occupies the whole interior. A Portuguese, Antonio Abreus, discovered this groupe in 1512, at which time they were inhabited by Malays. The Portuguese established a settlement here in 1524; but the Dutch drove them from it in 1599, and nearly extirpated the aborigines also. In 1810, the British captured these islands; but, in 1814, they were restored to the Dutch. They form a particular government, or residency, under the governor-general of Batavia. This residency now includes besides the eastern part of Great Ceram, with the islands of *Koffing Ceram*, *Laut*, *Gisser*, *Goram Key*, and *Arow*, and in general all the other little islands to the E. and S. of Banda. The population of the six inhabited Banda islands, in 1796, was 5,763, of whom only 119 were Europeans.

Authorities.] Radennacher's Beschreibung der Insel Celebes.—Woodard's Narrative, Lond., 1804, 8vo.—Crawfurd.

CHAP. VI.—JAVA AND MADURA.

Situation and Extent.] The island of Java, the centre of the power of a commercial company which once ruled all the eastern sea, is inferior in size to Borneo and Sumatra: being only 666 miles long, and from 50 to 135 miles in breadth. Its superficial area is estimated by Stein at 52,335 square miles. It lies between 5° 52′ and 8° 46′ N. lat. and 105° 11′ and 114° 3′ E. long. On the N. it has the sea of Java, on the E. the straits of Bali which separate it from the island of that name, on the S. the Indian ocean, and on the W. the straits of Sonda which separate it from Sumatra.

Name and History.] The name *Jawa*, corrupted by Europeans into *Java*, in the Malay, signifies, according to some, 'the great island,'—according to others a particular grain which grows upon it,—but, according to Sir Stamford Raffles, is properly the name of the principal nation of the island, bestowed, as is common in such cases, upon the whole territory. The Arabs and Persians call it *Djezeeret ool Maha-radje*, or 'the island of the great king.' Some have supposed it to be the Ιαβὰ διαύ of Ptolemy. It was discovered in 1510 by the Portuguese, who founded various settlements on its coasts, from which they were driven towards the end of the 16th century by the Dutch. The fall of the United States of Holland, brought about the transfer of Java and its dependencies to Great Britain; an expedition having been despatched from India, against this island in 1811, which took possession of the Dutch settlements after considerable resistance. It was restored to its former proprietors in 1816; yet, short as the period was during which we held possession of this island, much was accomplished for its amelioration and advancement within that brief space. By the abolition of forced services and arbitrary and vexatious imposts,

and by the establishment of a moderate and equitable land-tax, the commerce and the agriculture of the island so rapidly improved, that the amount of the revenue received in three years, from 1212 to 1815, was 18,810,149 Java rupees; while the amount of the preceding three years, under the extortions practised by marshal Daendals, who placed himself above the usual formalities, and disregarded all law, was no more than 8,425,765 rupees. M. Depping corroborates our assertion respecting the improvement effected on this island by the British in these terms: "The old monopoly vanished, ancient secrets were divulged, day succeeded to night, Sir Thomas Stamford Raffles was placed at the head of the Batavian Society, naturalists, such as Horsfield, laboured in its service, a fresh spirit was infused into its proceedings. English research prevailed, and with this, loftier views, a more intimate acquaintance with the state of science in Europe, and a tenor of conduct far more befitting the character of a learned institution. Raffles and Horsfield have alone done as much as one-half the members of that society before them." It would seem, however, that the Dutch have not profited by the lesson of humanity and economy taught them by the British. Having renewed their odious imposts and forced service, the moment the island was restored to them, the native chiefs rose against their oppressors, and have kept up a constant struggle with the Dutch forces ever since, although latterly their principal leader, it is said, has recently surrendered himself to the Dutch authorities.

Coasts.] The most remarkable circumstance in the form of Java, is its irregularity, narrowness, and great length, which necessarily give it an extraordinary extent of coast. The northern coast presents a considerable number of bays. Setting out from Cape Sandaro, the N.E. extremity of the island, and going W., we encounter a vast bay protected on the N. by the island of Madura. The next object is Cape Mandalia, at the extremity of a remarkable peninsula, which is succeeded by Cape Indramayo, Batavia and Bantam bays, and Cape St Nicholas. At the extreme N.W. point, the coast turns suddenly S.W. forming Pepper bay, and Delkom bay. The southern coast commences with Cape Java, and presents one of the deepest bays in the whole island, the bay of Winkoopers, to the S.E. of which we encounter Cape Vinezen. Eastern Cape forms the S.E. extremity of the island, and between this point and Cape Sandava, the only remarkable inlet is the bay of Balemboang. The principal harbour next to Susabaya, is that of Batavia, which is a kind of roadstead sheltered by several islands. Indeed, the whole of the northern coast, from the smoothness of the sea, and the numerous islands with which it is studded, may be considered a harbour, at least when we regard the mildness of the seasons, and the tranquillity of the seas in these parts.

"The general aspect of Java, on the northern coast," says Sir Thomas Raffles, "is low; in many places swampy, and overgrown with mangrove trees and bushes, particularly towards the west. The southern coast, on the contrary, consists almost entirely of a series of rocks and cliffs, which rise perpendicularly to a considerable height. In the interior, stupendous mountains stretch longitudinally throughout the island; while others of an inferior elevation, and innumerable ranges of hills running in various directions, serve to form and confine plains and valleys of various elevation and extent. On the northern side, the ascent is in general very gradual from the seacoast to the immediate base of the mountains, particularly in the western part of the island, where it has the greatest breadth, and where the mountains are situated far inland.

"Although the northern coast is in many parts flat and uninteresting, the interior and southern provinces, from the mountainous character of the country, may be reckoned amongst the most romantic, and highly diversified in the world; uniting all the rich and magnificent scenery which waving forests, never-failing streams, and constant verdure, can present; heightened by a pure atmosphere, and the glowing tints of a tropical sun.

"Quitting the low coast of the north, in many parts unhealthy, the traveller can hardly advance five miles inland, without feeling a sensible improvement in the atmosphere and climate. As he proceeds, at every step he breathes a purer air, and surveys a brighter scene. At length he reaches the high lands. There the boldest forms of nature are tempered by the rural arts of man; stupendous mountains clothed with abundant harvests; impetuous cataracts tamed to the peasant's will. Here is perpetual verdure; here are tints of the brightest hue. In the hottest season the air retains its freshness; in the driest, the innumerable rills and rivulets preserve much of their water. These the mountain-farmer diverts in endless conduits and canals, to irrigate the land, which he has laid in terraces for its reception; it then descends to the plains, and spreads fertility wherever it flows; till at last, by numerous outlets, it discharges itself into the sea."

Physical Features.] Java is almost wholly volcanic; and a series of mountains betraying this origin, and varying in their elevation from 800 to 12,000 feet above the level of the sea, extends from E. to W. through the whole length of the island. The several large mountains in this series, though different from each other in external figure, agree in the general attribute of volcanic features, having a broad base, gradually verging towards the summit in the form of a cone; but they also exhibit indications less equivocal of their origin, such as craters completely extinct, others with small apertures, which continually discharge sulphureous vapours, and some which have emitted flame within a recent period. The following is a list of the principal elevations, as measured by M. Reinwardt.[1]

	English Feet.
Tjikaracha in the district of Manahaija - - - - -	4017
Source of the Tjitarum - - - - - - - -	4645
The N. peak of Tiloe in the district of Banjarau - -	5425
Goenong Goentner in the district of Timangamen - -	6085
Salak - - - - - - - - - - - -	7172
Gede - - - - - - - - - - - - - -	9075

They all rise from a plain, but little elevated above the level of the sea. and each must be considered as a separate mountain raised by a cause independent of that which produced the others. Besides the larger series, there are extensive ranges of inferior elevation, sometimes connected with the larger series, and sometimes independent of them. The geological constitution of the island is unfavourable to the existence of metals. No diamonds are found, or any other precious stones; but schist, quartz, felspar, potstone, and trap, are abundant; porphyry is also said to be found in Java.

The most important rivers are those of the *Crawang*, the *Indramayo*, and the *Solo*, which flow into the sea of Java, the *Kadiro*, the *Kalitendo*, and the *Brossat*. None of them are navigable for any considerable way into the interior, but there are probably 50, that in the wet season bear

[1] As the thermometer has been observed so low as 27° of Fahrenheit, or 5° below the freezing point, on the summit of Lindoro, it is clear that its altitude must be greater than the highest of those measured by M. Reinwardt.

down rafts charged with timber and other rough produce, and not less than 5 or 6 at all times navigable to the distance of 5 or 6 miles from the coast. Several other rivers fall into the sea along the northern coast; and countless rivulets, though not navigable, serve to irrigate the plains and valleys through which they flow. A few insignificant streams discharge their waters into the sea on the southern coast, which is very little known or frequented. Among the mountains of the interior, are scattered several small but beautiful lakes, most of them supposed to be the craters of extinct volcanoes.

Climate.] The seasons are here distinguished not by hot and cold, but by wet and dry. The westerly winds—which bring rain generally—set in during the month of October, become more steady in November and December, and gradually subside, till, in March or April, they are succeeded by the easterly winds and fair weather which continue for the remaining half of the year. The heaviest rains are in December and January; and the driest weather in July and August, when the nights are coldest and the days hottest. Thunder and lightning are very frequent. Occasional showers, even in the driest season, refresh the air; and the landscape is at all times of the year covered with the brightest verdure. The thermometer of Fahrenheit has been observed on the northern coast, and particularly in the large and low capitals of Batavia, Samarang, and Surabaya, to indicate above 90°; but, by a series of observations published under the authority of the Dutch government, it has been found usually to range between 70° and 74° in the evenings and mornings, and to stand about 83° at noon. In the interior, among the hills, it seldom rises higher than from 67° to 70°; and on the summit of Lindoro it has been observed as low as 27°. On the whole, the climate of this island—with the exception of Batavia and some other low swampy places on the northern coast—is considered on a level, in point of salubrity, with the healthiest parts of British India, or of any tropical country in the world. Governor Raffles gives a table discovered among the Dutch records, by which it would appear, that the amount of deaths in Batavia, from the year 1730 to 1752, exceeded 11,000,000 of souls, or nearly 50,000 a year! In 1722 upwards of 4000 souls were destroyed by an irruption of the Papandajang.

Productions.] This island is fertile and beautiful; and its soil yields almost every thing which the cultivator can desire. The soil is for the most part rich, and remarkable for its extraordinary depth and fertility. By the side of tropical plants are found most European vegetables, and various fruits of more temperate zones; these are sure to succeed where proper attention is paid to the relative qualities of soil and climate. The mountains and valleys, hills and dales, coast exposures and inland shades, offer an inexhaustible variety of vegetable productions. Rice is here,—as almost every where in the East,—the staff of life; maize, or Indian corn, is an important article in the agriculture of the island, as is the *rachang*. The sugar-cane, coffee-shrub, pepper, indigo, tobacco, several tuberous roots, nutmegs, aloes, cloves, cinnamon, most of the European plants, and a great number which afford oils, all contribute abundantly to the necessities and luxuries of the inhabitants of Java, and furnish valuable articles of commercial export. The choicest fruits of tropical climes abound in Java. Ornamental and medicinal plants, and those whose fibres are convertible into rope, thread, and cloth, abound in Java. Amongst the former are the *datura*, the cubeb-pepper, and the *upas*, the extreme poisonous qualities of which have given rise to some ridiculous exaggerations. A

tree, however, named *Anchar*, and a shrub called *chetik*, are possessed of a malignity almost as quickly destructive to life as the gum from the upas has been described to be. The teak grows in considerable forests; but it does not appear that many trees exist of a size sufficient for ship-building. The island produces a great variety of other trees for house-carpentry and furniture, and some which yield resins and gums. Notwithstanding the extent to which cultivation has been carried in many districts of Java, large portions are still covered with primæval forests.

Many districts of Java, Pfyffer affirms, are untenantable, on account of the number of tigers by which they are infested, and this in spite of a reward of about 27*s.* for the capture of a royal tiger, and 7*s.* for that of a spotted tiger. The rhinoceros inhabits this island, and is a powerful and dangerous animal when provoked. Even the Javanese, though in general good marksmen, are shy of hunting this animal. The *kalong*, which is also called 'the flying fox,' on account of its breast and tail, is an immense bat. It has hooks on its wings, by means of which it suspends itself to the branches of fruit-trees in the right-time, but when day-light appears it flies back to its sequestered haunts. When they roam about at dusk in quest of prey, they associate by thousands, and obscure the sky for several minutes. Peacocks are found in the solitary mountainous districts. The number of distinct species of birds is stated to be somewhat more than 200. The edible birds' nests, exported in large quantities to the Chinese market, have long been known as the production of a small swallow, *hirundo esculenta*. The mucilaginous substance of which the nests are formed, is not, as has been generally supposed, obtained from the ocean; but is an animal elaboration. On the dissection of one of these birds, by Sir E. Home, he discovered a set of secretory organs peculiar to itself, by which, there is little doubt, the mucilagirous matter of these nests is elaborated. This little bird, frequenting the rocks and caverns of Java, furnishes an article of commerce, the annual value of which exceeds 500,000 Spanish dollars. The crocodile of Egypt is found in the rivers, and that species of lizard called the *lacerta monitor*. Turtles, tortoises, frogs, snakes, and insects, are numerous. There are above 20 species of serpents reputed venomous. Of fish there is great variety in the rivers, lakes, and adjoining seas. Though sulphur is found more or less in the vicinity of every volcano, we believe the only instance known of sulphuric acid found in a state of nature is in the island of Java, near Batavia. A lake of sulphuric acid occupies the crater of an extinct volcano, from whence it flows in a rivulet down the sides of the mountain to a considerable distance. In the dry season this acid rivulet becomes absorbed by the sandy soil through which it runs; but in the rainy period it unites with another stream, called the White river. The water of the latter, though saturated with a whitish clay, is not unwholesome either to fish or other animals. But after the junction of the acid rivulet, the stream becomes transparent, the acid precipitating the earthy matter, and destroying not only the fish, but all the vegetation it passes over.

Population.] The Dutch East Indian government have always had much difficulty in obtaining correct censuses of the population of their possessions: "For," says Pfyffer, "the princes, or other great lords, strive as much as possible to increase the number of their households, and endeavour to avoid making any return of births, being apprehensive of the interference of the government, who allow them no greater number of servants than their rank or necessities require." The priests, too, are accustomed

to oppose the taking of censuses, upon the authority of the koran, which calls down the punishment inflicted on king David on the heads of such as number the people. Governor Raffles has given two tables of the population: the first taken by the Dutch, and not to be depended on; the second by the British government, and under far more favourable circumstances. From the latter it appears, that the population of Java and Madura, in 1815, amounted to 4,615,270 souls, the number of males and females being nearly equal. The population of the native capital, Surakerta, was estimated at 105,000; and that of Yugya-kerta at something short of this; that of Batavia had dwindled to 60,000, or about one-half of its former number. Pfyffer, in his 'Skizyen von der Insel Java,' published in 1829, says that the population is now thought to exceed 5,000,000 souls. Among the foreign settlers, the Chinese are the most numerous, as well as the most important. There are nearly 100,000 Chinese in this country, and they are said to be "the life and soul" of its commerce. The Bugis and the Malays are established in the maritime towns only; of the latter about 500,000 inhabit the western part of Java, and speak the Sunda language. Like the Chinese, they have their own officers, who are responsible to the government for the conduct of the people under their command. The majority of the Arabs on the island are priests; they are a mixed race, and prevail most on the eastern extremity of the island, where Mahommedanism was first planted. The Javanese possess no slaves; those which are found on the island are the property of Europeans and Chinese alone, and are generally procured from the islands of Bali and Celebes; they amount to about 30,000.

Javanese.] In common with the inhabitants of the whole Indian archipelago, the inhabitants of Java are pronounced by Sir S. Raffles to bear in their features marks of Tartar origin. The Javanese are in general taller than the Bugis, but inferior to the Malays. Their colour is that of "virgin gold;" their limbs are slender, their wrists and ankles particularly small, the forehead high, the eye of the Tartar cast, the nose small and somewhat flattened, the mouth well-formed, the cheeks prominent, the beard scanty, the hair lank and black. The countenance is mild, placid, and thoughtful; and easily expresses respect, gaiety, earnestness, indifference, bashfulness, or anxiety. The women are in general less good-looking than the men; and, when old, appear hideously ugly: those of the higher class, who are not exposed to hard labour and the weather, have a share of personal beauty. The manners of the Javanese are easy, courteous, and respectful, even to timidity; pliant and graceful, the people of condition carry with them an air of fashion and good breeding, and are not in the least disconcerted by the stare of the curious.

The condition of the peasant of Java would, under a mild and equitable government, be truly enviable. His cottage, or hut, costs him not more than from 2 to 4 rupees, or from 5 to 10 shillings; the pliant bamboo furnishes him with the materials for the walls, the partitions, and the roof; the dwellings of the petty chiefs are larger, but do not exceed in value 40 shillings each. Those of the chiefs and nobles are still larger; they have supports and beams of timber, and cost about £10 or £15. The Chinese have buildings of brick and mortar. The cottages of the Javanese are never insulated, but formed into villages, whose population extends from 50 to 200 or 300 inhabitants; each has its garden; and this spot of ground surrounding his simple habitation, the cottager considers as his peculiar patrimony, and cultivates it with peculiar care. "He labours,"

says governor Raffles, "to plant and to rear in it those vegetables that may be most useful to his family, and those shrubs and trees which may at once yield him their fruit and their shade; nor does he waste his efforts on a thankless soil. The assemblage of huts that compose the village become thus completely screened from the rays of a scorching sun, and are so buried amid the foliage of a luxuriant vegetation, that at a small distance no appearance of a human dwelling can be discovered; and the residence of a numerous society appears only a verdant grove, or a clump of evergreens." It is true, that the slavish submission of the inferior to his superior, amongst the Javanese, makes a melancholy impression upon the mind of a European. The Javanese does not receive the commands of his *radehn*, or 'noble master,' or *orang besar*, 'superior,' in an erect posture, but in the lowliest attitude he can devise; stooping down or sitting with his legs crossed and his body bent forwards. Whilst the order is giving, he frequently repeats the expressions, *Nja nun!* or *nun!* 'yes, my lord and master,' though he uses *tuan*, 'master,' when addressed by a European. Without rising from the ground, or even casting his eye upwards, he now and then brings his hands together by the tip of the fingers, and raises them to his head, in token of his entire submissiveness. We find, however, by degrees, that this condition, to which our principles of independence would attach the name of slavery, is any thing but galling. Their servility implies just as much and no more than touching the hat, or other every-day civilities, among most Europeans: and, on the whole, (such is the warmth of the climate and the natural fertility of the soil,) there is scarcely a happier mortal under heaven's canopy than the peasant of Java.

Every village forms a community within itself, each having its officers, its priests, and its temple appropriated to religious worship. What Christian but ardently prays, that these synagogues of idolatry may be supplanted by temples dedicated to the worship of the only living and true God! The furniture of the cottage is equally simple with the cottage that contains it, and consists but of a few articles; the bed is nothing more than a mat, with pillows; the inhabitants use neither tables nor chairs, but sit cross-legged; and, in common with other Mahommedans, make use of the right hand only at their meals. Rice is the chief article of their subsistence; but various pungent pickles and condiments are used almost with every species of food. Water is the principal and almost exclusive beverage; it is generally drank warm; sometimes a little cinnamon or other spice is thrown into it; and tea is commonly taken between meals. Of these there are two a day, one just before noon, and the other between seven and eight in the evening. The betel-leaf and areca nut are indispensable articles for all classes; and the use of that deleterious drug, opium, is far too extensive for the health and happiness of the inhabitants. Agriculture is the principal employment of the Javanese; indeed they are a nation of husbandmen. The wealth of a province or village is measured by the extent and fertility of its land,—its facilities for rice-irrigation,—and the number of its buffaloes.

Though the Chinese in a great measure monopolize the manufactures and handicraft trades, the Javanese are far from being deficient in natural sagacity or docility. Like most eastern nations, they are enthusiastic admirers of poetry; and are said to possess a delicate ear for music. They have a kind of improvisatricci amongst them in their *rongins*, or dancing-girls. Pfyffer says of a rongin: "Her songs are impromptu, and suited to her auditory. In the twinkling of an eye she selects the preferable

points of her admirer's exterior; an arch smile lights up her features; she extols his handsome figure, his noble bearing, his eyes, feet, and dress, and sums up her eulogy with a seductive, and apparently artless portraiture of his liberality and munificence. These girls also recite national ballads, of which the substance is derived from the legendary recollections of their ancient rulers. Many of these ballads are perfect fac-similes of Ovid's Metamorphoses, and constitute a portion of Javanese mythography." The Javanese are remarkable for an unsuspecting and almost infantine credulity, lending an easy credence to omens, prognostics, soothsayers, and quacks; they are the ready dupes of any religious fanatic, and give credit, without scruple or examination, to the claims of every pretender to supernatural powers. Listless and unenterprising as they generally are, no sooner is their religious enthusiasm excited, than they become at once adventurous and persevering, esteeming no labour arduous, no result impossible, and no privation painful. Here, as in many other of the Asiatic islands, the people, and especially the slaves, are frequently guilty of those dreadful acts of vengeance called 'running a muck;' in which the infuriated individual aims at indiscriminate slaughter, till he himself is killed like a wild beast. There are instances on record, wherein whole villages have devoted themselves to inevitable destruction, to avenge an injury or insult.

Zengger and Bedui.] To the eastward of Sorabaya, are the Zengger mountains, on which is found the remnant of a people, amounting to about 1200, who follow the Hindoo worship. They occupy about 40 villages, in the most beautifully rich and romantic spots in Java,—a region where the thermometer is frequently as low as 42°,—where the summits and slopes of the hills are covered with alpine firs,—and where plants common to an European climate flourish in luxuriance. At the opposite extremity of the island, in the interior of Bantan, is another tribe called the *Bedui*, the descendants of those who escaped into the woods after the fall of the western capital of Bajagaram, in the 15th century, because they would not change their religion; and who, when at length they submitted to the sultan of Bantan, did it on condition that they should not be compelled to adopt the faith of the Koran: they retain some singular customs, but their numbers are inconsiderable.

Government.] The government of the Javanese is a pure unmixed despotism; but there are customs of which the people are very tenacious, and which the sovereign seldom invades. His subjects have no right of liberty, of person or property: his breath can raise the humblest individual from the dust to the highest distinction—or wither the honours of the most exalted. There is no hereditary rank; nothing to oppose his will. Not only honours, posts, and distinctions, depend upon his pleasure, but all the landed property of his dominions remains at his disposal, and may, together with its cultivators, be parcelled out by his order among the officers of his household, the members of his family, the ministers of his pleasures, or the useful servants of the state. Every officer is paid by grants of land, or by a power to receive from the peasantry a certain proportion of the produce of certain villages or districts.

States of Susuhunan and Djocjokarta.] "The eastern portion of Java," says Pfyffer, "is the seat of two native governments; that of the *Susuhunan*, or emperor of *Surakarta*, and that of the sultan of *Djocjokarta*, (*Yugya-kerta.*) Though the power of both has been considerably curtailed, and they are mainly dependent upon the Dutch authorities, their influence is still of so formidable a nature, that the intervention of a single

warlike and able individual would speedily enable them to re-assert their independence; and, from their superior numbers, combined with the pernicious character of their climate, to extirpate their European masters. So long as these two kingdoms are permitted to exist, the possession of Java by the Dutch must be fraught with insecurity. Fanaticism, jealousy, and inextinguishable hatred, lurk in the dismal recesses of the island, and the native omits no opportunity which offers of sowing distrust and contempt of Europeans, who are called *Orang Kapir*, 'pagans,' or 'infidels.'" These provinces comprehend about one-fourth of the island, and include some of its richest districts.

Batavia.] The chief towns of Java are: *Batavia*, *Solo*, *Djaijaienta*, and *Samarang*. Batavia is termed the capital, although only the fourth in point of population. Of the magnificence which procured for this capital the title of 'Queen of the East,' little is now to be found. Streets have been pulled down,—canals half-filled up,—forts demolished,—and palaces levelled with the dust. The first appearance of Batavia, when you have fairly entered into the town (for before then, it is, in common with the native towns, hid in a forest of ever-verdant fruit and ornamental trees), is rather imposing. The houses in the European parts of the town are spacious, but inelegant, and built according to no known rules of art. The upper story is a receptacle for lumber, and the lower, or ground-floor, is filled with a quantity of clumsy furniture, such as cabinet work, the ill-finished manufacture of the country, after the Dutch models of the 16th century, lustres of painted glass, and defaced mirrors. The recent extended connection with Europe is gradually dispelling this kind of barbarism, and the modern settlers successfully imitate the taste and fashions of the British. The public edifices are neither numerous nor splendid. The few public institutions are: the orphan chamber, which administers to the estates of all persons dying intestate, or whose executors are absent,—the supreme college of justice, consisting of a president and two members,—and a literary society, instituted in 1777, and renewed during the temporary government of the British. This society has published seven Dutch volumes, and two English, which contain a few essays of some merit. The administration of the town, and the management of the police, are solely in the hands of government, who depute their authority to a bench of magistrates. Batavia is, from its westerly situation and easy access, the best and most convenient port in the island. In point of security, however, and conveniency for the landing and shipping of goods, it bears no comparison to the fine harbour of Surabaya. Batavia is even better known in Europe by its fatal climate, than by its great trade and central situation. The disease which chiefly proves mortal, is a fever of the remittent kind. Dysenteries are very rare; and inflammations of the liver, which terminate fatally by the formation of matter, are of a chronic nature, and almost always the consequence of long-continued spirituous intemperance. The merchants who transact business in the town during the day enjoy as large a share of health as the European residents of any tropical climate whatever; but a stranger who sleeps for six or eight days successively in the town, may certainly reckon on catching the fever, and it is more than an equal chance but he falls a victim to this terrible malady. Batavia owes its insalubrity to the recession of the sea for a space of many hundred yards, by which an extensive mud flat is left uncovered, and to the injudicious dissipation of the waters of the river into numerous stagnant canals, poisoning the purity of the air, and depriving the river of the natural impetus

which would have kept its channel clear of the impurities which now choke its mouth, or lie putrifying on it banks. At present, the salubrity of the site has enticed all respectable persons to take up their residence at *Weltevreden*, *Konigsplein*, or *Meister Cornelius*, about 6 miles beyond the city, where you may ride for several miles amidst elegant country-seats, built in the English or Italian style. Few Europeans reside in Batavia, excepting those who are directly concerned in shipping.

MADURA.] Madura, an island lying close to Java, where it is narrowest, and seeming to form a part of it, is 91½ miles in length, and about 31 in breadth. The central region is a continued ridge of no great elevation. The soil produces rice in great abundance; buffaloes, sheep, and bay-salt are also exported. The population, according to a census taken in 1815, was 218,659 souls, of whom 6,344 were Chinese. The natives speak a peculiar language, and have less resemblance to the Malays than most of the eastern islanders. The principal towns are *Samanap*, *Parmacossan*, *Bancallan*, and *Kamal*; and the chief subordinate isles are *Gallion* and *Pondi*.

Authorities.] Journal der Reize na Java, etc. door S. C. Nederburgh, Amsterd., 1805, 8vo.—Raffle's History of Java, 2 vols. 4to. Lond., 1818.—Travels by Kienberg, Tombe, Dabellardiere, Stavorinus, and Roggeveen.—Professor Reinwardt's Notes in the Batavian Courant.—Asiatic Journal.—Kaart van Eiland Java, 1818.—Pfyffer's Sketches.

CHAP. VII.—THE TIMORIAN CHAIN.

TIMOR.] The large island of Timor is situated between the 8th and 11th degrees of southern latitude, and the 123d and 127th of eastern longitude. It is throughout a hilly country. Its limestone-mountains exhibit sea-shells at an elevation of 800 feet; they frequently present a conical shape; but it is not known whether any volcanoes exist among them. The whole island is subject to frequent earthquakes. The valleys are generally very narrow with steep sides, but in a few instances open into plains of considerable extent. The rivers are all small, and so steep that none of them are navigable beyond the influence of the tide, which seldom extends above 400 yards, and in the flattest not above two miles. *Delli* harbour, on the N.E. coast, is well-defended from the sea by a reef of rocks. *Coupang* harbour, on the S.W. coast, is a large bay, about 12 miles wide at the mouth, and upwards of 20 feet deep, formed by the island of *Semao* to the S.W. and a point of Timor to the N. It is entirely open to the N.W.

Productions.] The enthusiasm of navigators, who have visited this island immediately after leaving the tiresome shores of New Holland, has created some exaggeration in their descriptions of the fertility of this island; yet it is certainly a very pleasing spot. The cultivation chiefly consists of rice, maize, millet, *kachang*, yams, sweet potatoes, and cotton. Maize is the principal article of food, but the natives depend for a great part of their food on the sugar of the Lontar-palm, and the produce of the sago-palm. The use of the plough is unknown: a wooden hoe and sharp-pointed stick are the only implements used in the hill-cultivation. The average annual crop of paddy is 70 fold. Cocoas and areca palms are very scarce; but the lontar is abundant, and small quantities of sugar-cane are raised. Fish can scarcely be considered as an article of subsistence, as there are scarcely any of the natives who will trust themselves in a

canoe. The bee is not domesticated here, nor indeed in any of the islands in this quarter; but the vegetation supports an infinity of wild bees. Gold is found in several of the rivers, both in lumps and grains. Two of the most productive rivers are situated within the Dutch government; but the natives are superstitiously afraid of taking gold from these rivers, and are said never to do so without sacrificing a human being to the river deity. Copper is said to abound in the *Phillaran* hills, which are situated near the centre of the N.W. side of the island. The specimens which have been procured are large masses of native copper imbedded in hard white shining stone.

Dutch and Portuguese Possessions.] The Dutch and Portuguese claim between them the entire sovereignty of this island: Fort Concordia being the seat of the government of the former, and Delli of the latter. But the power of both is so much decreased at the present day, that their authority is only acknowledged by such of the native chiefs as need their assistance against their more powerful neighbours. The nominal boundary of the two governments cannot be formed by a line drawn in any direction, as some of the petty states near Delli are under Dutch protection, while others, near Coupang, are under the Portuguese. It is, however, considered that the whole of the country to the E. of Delli belongs to the Portuguese; and the whole of the S. coast to the Dutch. Along the N.W. coast the two governments are completely mixed.

Population.] It is impossible to form any correct estimate of the population. The inhabitants are said to be numerous in the interior and along the S. coast; but very few villages are to be seen on the N. coast, and these consisting only of a few huts. It appears, however, the general custom of the island not to form themselves into large communities. The natives are generally of a very dark colour, with frizzled bushy hair, but less inclining in appearance to the Papuans than the natives of Eude. They are below the middle size, and rather slight in their figure. In countenance they more nearly resemble the South sea islanders than any of the Malay tribes. The peasants of both sexes wear a cloth only wrapped round their loins; the rajahs generally were *bajus* of silk or chintz, with five or six handkerchiefs of different colours wrapped loosely round their heads. Their ornaments chiefly consist of arm-rings of gold, silver, or ivory; the women wear arm and ankle-rings of earthenware. There does not appear to be any system of laws amongst them; the will of the sovereign being in all cases supreme. The religion of the island is pagan; most of the princes, indeed, prefer Christianity, but are entirely guided by their pagan priests and customs. Their deities are represented by particular stones or trees; they call them *nicto*, or 'evil spirits;' and pray to them to avoid the evils they suppose would otherwise be inflicted by them. Sacrifices are common, and generally consist of buffaloes, hogs, sheep, or fowls; but sometimes a human being is sacrificed, and, until Dutch interference put a stop to the practice, a virgin was annually sacrificed to the sharks and alligators close to the town of Coupang. The arms at present in use are muskets and spears of iron or bamboo; bows and arrows are only used by a few natives in the interior. Obtaining the head of an enemy in battle is considered the highest feat of arms. The feudal system seems to exist throughout the island; for every man capable of bearing arms is obliged to attend the call of his feudal lord. Some of the rajahs call themselves the descendants of caymans, or crocodiles, and seem to be every way worthy of such illustrious descent. It has been supposed that not less than 40 languages are spoken on the island.

Trade.] The trade of Timor is considerable, particularly at Delli. The principal imports are coarse blue and white cloth, large pattern chintzes, red handkerchiefs, China silks of gaudy patterns, muskets, gunpowder, iron, coarse cutlery, and lead. The exports are principally wax, sandlewood, and cattle. The method of trading is singular. When the prows arrive off the coast, they land the articles which they have for barter, in small quanties at a time, on the beach; whereupon the natives come down with the produce they have for sale, and place it opposite the goods from the prows, pointing to the articles they wish to obtain in exchange. When an offer is considered sufficient by the native, he snatches up the proffered goods, and darts off into the jungle, leaving his own; or should he be unable to obtain what he considers an adequate offer, he seizes his own property, and flies off with equal haste, never returning a second time. The annual trade of Coupang alone—which is not supposed to exceed one-fourth of the trade of the whole island—has of late averaged 1,200,000 Spanish dollars.

ROTTI.] Rotti is the largest of the islands under the residency of Coupang, and is situated to the S.W. of Timor. It is about 38 miles broad, and 60 long; and is at present divided into 18 districts, under the government of as many rajahs, who can bring upwards of 10,000 armed men into the field. This island is a succession of low hills and narrow valleys; the soil is stony, but productive; the rivers are few and small. The productions are the same as those of Timor. The trade is almost entirely confined to the exchange of palm sugar, with the Bontan prows, for cotton; of horses and buffaloes, with whalers, for ammunition; and of bees' wax for European and Indian manufactures with Coupang. The natives are darker than the people of Celebes, but are remarkable for having long black hair, whilst nearly the whole of the inhabitants of the surrounding islands have frizzled hair. Their features bear a stronger resemblance to the natives of India than to those of the eastern islands. They are esteemed a mild-tempered people. Their religion, customs, and belief in auguries, are, in most respects, the same as those of the Timorese; but the natives of the two islands do not understand each other's dialects. The slave trade was formerly carried to a great length on this island: several hundred slaves being annually exported to Batavia, Amboyna, and other Dutch settlements.

SAVU.] Savu is a small island, and, according to some, the name of two small islands, lying about 60 miles due W. of the N. part of Rotti. They are hilly throughout, but fertile. The natives bear a strong resemblance to the Timorese, but are of a fiercer disposition.

SANDAL-WOOD ISLAND.] The large island called, from its produce, by the Dutch, *Sandal-bosche* or 'Sandal-wood' Island, has, in the Malay language the name of *Poolo Tchinnana*, which has the same import, but, by the natives is called *Sumba*. It was formerly under the authority of the Dutch, but about 30 years ago the natives threw off their allegiance in consequence of the Dutch persisting to cut sandal-wood, and the natives having a belief that for every tree of it which is cut down some one of their number will be deprived of life; or, according to Hogendorp's account of the matter, supposing that these trees are the present abodes of the souls of their ancestors. The island is rather low in its appearance from the sea; there does not appear to be a single hill on it. The natives are said to be extremely savage, daring, and treacherous.

SOLOR, *&c.*] The chain of islands to the W. of Timor is double. We have followed the southern range, and are now to take a survey of the

northern, which are, in general, larger and closer together. Leaving the N. side of Timor, we count four islands extending in a westerly direction, called *Ombay*, *Pantar* or *Alao*, *Lombet*, and *Selrao*, all inhabited by very rude and fierce tribes, bearing a strong external resemblance to those of Timor. The island of *Solor* is divided from Selrao by a small strait. The inhabitants are divided into two classes: the mountaineers, who are, at the present day, perfectly savage,—and the inhabitants of the coast, who appear to be of the *Badju* tribe, and are frequently employed by the Dutch as seamen. They carry on some trade with Coupang, Macassar, and Sumbawa, and are expert fishermen. Their religion is Mahommedan; a few on the N. coast have been led to profess Christianity by the influence of the Portuguese.

Ende.] The island of Ende, or *Floris*, is nearly as large as Timor; but as the only European establishment upon it, that of *Larantuka*, belongs to the Portuguese, our knowledge of it is slender. It appears from the sea to be very hilly in all parts, and on the S. coast there are several volcanic mountains of great height. The natives live chiefly in the interior, except at the E. end; the sea-coast and ports to the westward are occupied by colonies from Sumbawa and Celebes. The natives more resemble the Papuans than the Timorese. They form a number of petty states, which are constantly at war with each other for the purpose of making slaves, for whom, till at least of late, they always find a ready sale on the coast. In this island, as in Timor, there is a great multiplicity of local languages.

CHAP. VIII.—SUMATRA AND ADJACENT ISLANDS.

SUMATRA is a very large, but imperfectly known, island, situated between 5° 3′ S. lat. and 5° 40′ N. lat.; the equator dividing it into almost equal parts. It is 1,050 miles in length, and from 150 to 200 in breadth; with a general direction from N.W. to S.E. It is separated from Malacca by the strait of that name; from Borneo by the strait of Koremata; and from Java by the strait of Sunda. Its northern point stretches into the bay of Bengal; its S.W. coast is exposed to the Great Indian ocean. Crawfurd estimated its superficial area at 130,000 B. square miles. Among the eastern people generally this island is known by the names of *Pulo Purichu*, and *Indalas;* the origin of the term *Sumatra* is quite uncertain. By Marco Polo it is called *Java Minor;* and, by the Javanese, 'the land of Palembang.' By a recent treaty, the British government ceded their possessions in this island to the king of the Netherlands, in exchange for the Dutch settlements on the continent of India.

Physical Features.] This island is surpassed by few in the beautiful indulgences of nature. A chain of mountains runs through its whole extent; the ranges, in many parts, being double and treble, yet their altitude is not sufficient to occasion their being covered with snow during any part of the year. The highest point in the central chain is *Mount Ophir*, which rises to the height of 13,424 feet above the level of the sea. A number of the mountains are volcanic. Between these ridges are extensive plains, considerably elevated above the surface of the maritime lands. In these the air is cool; and, from this advantage, they are esteemed the most eligible portion of the country, are the best inhabited, and the most cleared from woods, which elsewhere, in general, cover both hills and valleys with an eternal shade. The western coast of Sumatra is well supplied with rivers, but they are, in general, too shallow and rapid for the purpose

of navigation. On the N.E. coast, the mountains being at a greater distance from the sea, the rivers attain a greater magnitude of volume. The largest on the western coast are the *Kataun*, the *Indrapura*, the *Tabayong*, and *Sinkel*, which are all inferior to the *Palembang*, the *Jambee*, the *Judragiri*, and the *Siah* of the E. coast. Mr Anderson made an exact survey of part of the E. coast of Sumatra, which must be of use to those who navigate those seas; he ascended also several of the rivers; and obtained information of a large lake, mentioned by Marsden, in the interior. It is a day's sail across with a good breeze. The borders of it are in a high state of cultivation. Boats, some of them having 50 men on board, navigate the lake. They are mostly pirates, plundering each other, and carrying off children, whom they sell for slaves. There is an island in the centre of this lake where the edible birds' nests are found, that are in such request in the Chinese market.

Productions.] It may easily be imagined, that a country situated immediately under the equinoctial line, and covered with deep alluvial soil, must be luxuriantly fertile; but the enormous size to which many of its productions arrive is almost incredible. We should look in vain in extra-tropical climates for any single flower measuring three feet in diameter, like that of the parasitical *Rafflesia*; or for a tuberose edible root weighing 400lbs.; or for melons, pumkins, and other species of the cucurbitaceous family, equal to half that weight; or for a shell-fish, one of which might sup 24 men. The choicest trees, herbs, and fruits, are every where found, many of them demanding no labour of cultivation whatever. The villages are situated in the midst of the most luxuriant groves and plantations of the cocoa-nut, betel-nut, bananas, jacks, dorians, mangosteens, guavas, mangoes, pomegranates, pine-apples, cashen-apples, tamarinds, the bread-fruit, several varieties of the orange, the lemon, the lime, and the pescing or plantain; while the air is scented with the sweetest perfumes from innumerable flowers.—Among the productions of this island may be mentioned the camphor-tree, which naturally produces camphor in a concrete state, indigo, brazil-wood, pepper, benzoin, coffee, cassia, and cotton. The total annual produce of pepper has been roughly estimated at 45,000,000 of pounds. The-nutmeg and clove have been introduced with great success at Bencoolen. The silk-cotton is among the most remarkable of the Sumatran vegetables. "It grows," says Marsden, "in pods from four to six inches long, which burst open when ripe. The seeds entirely resemble the black pepper, but are without taste. The tree is remarkable, from the branches growing out perfectly straight and horizontal, and being always three, forming equal angles at the same height: the diminutive shoots likewise grow flat, and the several gradations of branches observe the same regularity to the top. Some travellers have called it the umbrella-tree, but the piece of furniture called a dumb waiter exhibits a more striking picture of it." This cotton has not hitherto been applied to any other purpose than the stuffing of pillows, since it is supposed to be too brittle for the purposes of manufacture; but Marsden is of opinion that it has not hitherto been properly tried. In the forests are found the cabbage-tree, ebony, pine, sandal, the aloe, the teak, the manchineel, iron wood, and the banyan-tree.

Animals.] Man alone seems here to degenerate, while other animals obtain their largest size. The elephants are equal in magnitude to those of Ceylon; and the tiger, the rhinoceros, and the buffalo, are superior to those of the continent. The tigers are of great size, and are very numerous;

but, from a superstitious idea that they are animated by the souls of departed heroes, the natives can scarcely be brought to kill them. The orang-outang is a native of Sumatra, and several other species of Simiæ. The rivers are infested with alligators, to which Marsden seems inclined to attribute the powers of fascination. These alligators are also protected by an idea of their sanctity. The hog-deer, an animal rather larger than a rabbit, yields the bezoar, a substance to which have been attributed many medicinal virtues. The buffaloes are fuller, says Mr Anderson, than any bullock I ever saw in Smithfield market; and—to descend in the scale of beings—the common domestic fowl grows so large, that, standing on the ground, it can pick crumbs from an eating-table. It is a disputed point whether the huge hippopotamus exists in the rivers of Sumatra. Red ants, leeches, and musquitoes, form disagreeable annoyances in this country.

Minerals.] Gold is procured in the central parts of the island. It is asserted, that from 10,000 to 12,000 ounces of this metal have been annually received at Padang alone. Silver is not known. Tin is a very considerable article of commerce. Iron ore is procured, but not in large quantities. Sulphur and yellow arsenic are articles of traffic.

Population.] The inhabitants of Sumatra are rather below the middle size; their limbs are generally slight, but well-shaped, and particularly small about the wrists and ancles. The women follow the preposterous custom of flattening the noses and compressing the skulls of children newly born, and also pull out the ears to make them stand at right angles with the head. The males destroy their beards, and keep their chins remarkably smooth. Their complexion is properly yellow, wanting the red tinge that constitutes a tawny or copper colour. The females of the upper classes, not exposed to the rays of the sun, approach to a degree of fairness. Persons of superior rank encourage the growth of their hand-nails to an extraordinary length; the hands of the natives in general, and even of the half-breed, are always cold. The inland natives are superior in strength and size to the Malays of the coast, and possess also fairer complexions. Among the hills the inhabitants are subject to monstrous wens or goitres on the throat. Both sexes have the extraordinary custom of filing and disfiguring their teeth, which are naturally white and beautiful from the simplicity of their food. Many, particularly the women of the Lampong country, have their teeth rubbed down even with their gums; others have them formed into points like equilateral triangles, while some file off no more than the outer extremity, and then blacken them with the empyreumatic oil of the cocoa-nut shell. The great men set their teeth in gold, by casing with a plate of that metal under the row; which ornament, contrasted with the black dye, has by candle-light a very splendid effect. Sometimes it is indented to the shape of their teeth, but more usually it is quite plain, and it is not removed either to sleep or eat. The original clothing of the Sumatrans is the same with that found by navigators among the South-sea islands, and in Europe generally called Otaheitean cloth. It is still used among the Rejangs as their working dress, but the country people now in a great measure conform to the costume of the Malays.

Manners and Customs.] The *dusuns*, or villages of the Sumatrans—for the inhabitants are so few that they are not entitled to the name of towns, are always situated on the banks of a river or lake, for the convenience of bathing and of transporting goods. The buildings are of wood and bamboos, covered with palm-leaves. The frames of the houses rest on stout wooden pillars about six or eight feet high, and are ascended to by a piece

of bamboo cut into notches. Detached buildings in the country are raised ten or twelve feet from the ground, to be secure against tigers. The furniture is extremely simple, and neither knives or forks are required, as in eating they take up the rice and other victuals between their fingers and thumb. The native Sumatran of the interior differs in some respects from the Malay of the coast, being mild, peaceable, and forbearing, unless roused by violent provocation. He is also temperate and sober; his diet being mostly vegetable, and his only beverage water. Their hospitality is great and their manners simple; and they are in general, except among the chiefs, devoid of the Malay cunning and chicane. On the other hand, they are litigious, indolent, addicted to gaming, dishonest in their dealings with strangers, which they do not consider as any moral defect, regardless of truth, mean, and servile; and, although cleanly in their persons, filthy in their apparel, which they never wash.

Cannibalism.] The Battas practise cannibalism in the punishment awarded to particular crimes. This fact is established by abundant and unquestionable evidence. The following account of this horrible custom is extracted from the 'Memoirs of Sir Stamford Raffles:' "A man had been found guilty of a very common crime, and was sentenced to be eaten, according to the law of the land: this took place close to Tappanooly. The resident was invited to attend: he declined, but his assistant and a native officer were present. As soon as they reached the spot, they found a large assemblage of people, and the criminal tied to a tree, with his hands extended. The minister of justice—who was himself a chief of some rank—then came forward with a large knife in his hand, which he brandished as he approached the victim. He was followed by a man carrying a dish, in which was a preparation or condiment, composed of limes, chillis, and salt, called by the Malays *sambul*. He then called aloud for the injured husband, and demanded what part he chose; he replied the right ear, which was immediately cut off with one stroke, and delivered to the party, who, turning round to the man behind, deliberately dipped it into the sambul and devoured it; the rest of the party then fell upon the body, each taking and eating the part most to his liking. After they had cut off a considerable part of the flesh, one man stabbed him to the heart; but this was rather out of compliment to the foreign visitors, as it is by no means the custom to give the *coup de grace*. It was with a knôwledge of all these facts regarding the Battas that I paid a visit to Tappanooly, with a determination to satisfy my mind most fully in every thing concerning cannibalism. I had previously set on foot extensive inquiries, and so managed matters as to concentrate the information, and to bring the point within a narrow compass. You shall now hear the result; but before I proceed, I must beg of you to have a little more patience than you had with Mr Mariner. I recollect then, when you came to the story of eating the aunt, you threw the book down. Now I can assure your grace that I have ten times more to report, and you must believe me. I have said the Battas are not a bad people, and I still think so, notwithstanding they eat one another, and relish the flesh of a man better than that of an ox or a pig. You must merely consider that I am giving you an account of a novel state of society. The Battas are not savages, for they write and read, and think full as much, and more than those who are brought up at our Lancasterian and national schools. They have also codes of laws of great antiquity; and it is from a regard for these laws, and a veneration for the institutions of their ancestors, that they eat each

other; the law declares that for certain crimes, four in number, the criminals shall be eaten alive. The same law declares also, that in great wars, that is to say, one district with another, it shall be lawful to eat the prisoners, whether taken alive, dead, or in their graves. In the four great cases of crimes the criminal is also duly tried and condemned by a competent tribunal. When the evidence is heard, sentence is pronounced, and the chiefs drink a dram each, which last ceremony is equivalent to signing and sealing with us. Two or three days then elapse to give time for assembling the people, and in cases of adultery it is not allowed to carry the sentence into effect, unless the relations of the wife appear and partake of the feast. The prisoner is then brought forward on the day appointed, and fixed to a stake with his hands extended. The husband, or party injured, comes up and takes the first choice, generally the ears; the rest then, according to their rank, take the choice pieces, each helping himself according to his liking. After all have partaken, the chief person goes up and cuts off the head, which he carries home as a trophy. The head is hung up in front of the house, and the brains are carefully preserved in a bottle for the purposes of witchcraft, &c. In devouring the flesh, it is sometimes eaten raw, and sometimes grilled, but it must be eaten upon the spot. Limes, salt, and pepper, are always in readiness, and they sometimes eat rice with the flesh, but never drink toddy or spirits; many carry bamboos with them, and filling them with blood drink it off. The assembly consists of men alone, as the flesh of man is prohibited to the females: it is said, however, that they get a bit by stealth now and then. I am assured, and really do believe, that many of the people prefer human flesh to any other; but notwithstanding this *penchant* they never indulge the appetite except on lawful occasions. The palms of the hands, and the soles of the feet, are the delicacies of epicures! On expressing my surprise at the continuance of such extraordinary practices, I was told that formerly it was usual for the people to eat their parents when they were too old for work. The old people selected the horizontal branch of a tree, and quietly suspended themselves by their hands, while their children and neighbours, forming a circle, danced round them, crying out, 'When the fruit is ripe, then it will fall!' This practice took place during the season of limes, when salt and pepper were plentiful; and as soon as the victims became fatigued and could hold on no longer, they fell down, when all hands cut them up, and made a hearty meal of them. This practice, however, of eating the old people has been abandoned, and thus a step in civilization has been attained, and therefore there are hopes of future improvement. This state of society you will admit to be very peculiar. It is calculated that certainly not less than from 60 to 100 Battas are thus eaten in a year in times of peace."

Languages.] The Malays of Sumatra use the Arabic character, and have intermixed their language with the Batta, Arabic, and Portuguese. The other principal languages of Sumatra, are the *Batta*, the *Rejang*, and the *Lampong;* the difference between these languages, however, is chiefly marked by their being expressed in distinct written characters.

Religion.] The ancient religion of the Rejangs, the Sumatran race with which we are best acquainted, is now scarcely to be traced. At present they seem to have no object of worship whatever, unless it be a species of genii which they call *orang alus*. The superstition which has the strongest influence on their minds is that which leads them to venerate, almost to the point of worshipping, the tombs and remains of their deceased ancestors.

TOPOGRAPHY.] The natives divide Sumatra into three regions: 1st, *Balla*, in the N., which includes the kingdom of *Acheen*, with the vassal principalities of *Pedeer*, *Passay*, and *Delli*. It is bounded on the E. side of the island by the river Sjac, and on the W. by the Sinkol. The interior of this division is inhabited by the Battas:—The 2d division is the ancient empire of *Benangkaboo*, comprehending the kingdoms of *Jambee* and *Andragiri*, on the E. coast,—in the interior the country of the Rejangs,—and on the W. coast the *Baroo* country, *Tappanooly*, *Natal*, and others, with the kingdom of *Indrapoora*. The 3d division is called *Ballumary*, or *Kampang*, and embraces the S.E. end of the island, including the state of *Bencoolen*.

Palembang.] The kingdom of Palembang—which amongst the native states of Sumatra holds the first rank—occupies that portion of the island to the southward of the equator which is included between the latitudes of 2° and 4° 30′. It is bounded on the N. and E. by the straits of Banca; on the S. by the Lampoong country; on the W. and S.W. by the ranges of mountains which separate the latter state from Bencoolen and its dependencies; and on the N.W. its limits adjoin the territories of the sultan of Jambee. The principal river, which is called the *Moosee*, and upon which the town of Pablemang is situated, runs through the whole extent of the country in a general direction from S.W. to N.E., having its source in the range of hills near to Bencoolen. With this river all the others belonging to the district have confluence, and the accumulated waters are disembogued into the straits of Banca by four different mouths. The *Soensang* branch affords the easiest communication with the town of Palembang, which, however, owing to the winding course of the river, is about 70 miles distant from the sea. The town is indeed accessible on the north and eastern sides only by means of these arms of the Moosee, for the whole coast of Sumatra, along the straits of Banca, presents nothing to the eye but a low flat of interminable swamps and jungles. The Soensang arm is navigable to Palembang by vessels of the largest burden. In some parts it is narrow; but in general it is of a noble breadth. The river throughout its whole extent is much infested with alligators; which are so daring and voracious as frequently to carry off the paddlers from the *pantjallangs* or canoes which navigate the stream. The town of Palembang is formed on both sides of the river, which is here 1200 feet in breadth. Some of the houses are erected upon large rafts of timber anchored near the banks, and which rise and fall with the tide; behind these are houses built upon piles of timber, and which at high water become insulated; at the back of these again a third row of houses built on the land presents itself. The palace of the sultan is a magnificent structure built of brick, and surrounded by a strong wall. The houses of the principal chiefs are commodious and comfortable. Not more than three or four houses have communication with one another except by boats; this arrangement proceeds more from the aquatic habits and inclinations of the people than from the force of circumstances. The town extends at least 3 miles along each bank, and contains a population of about 25,000 souls, including about 1000 Arabs and Chinese. The foreign trade from the town is carried on with Java, Malacca, Banca, Penang, Lingen, Rhio, and the eastern coast of Borneo. Two large Chinese junks arrive with the N.W. monsoon in January, and depart with the S.E. monsoon in August. The principal imports are woollen cloth, English chintzes, and coloured cottons, Bengal and Madras piece-goods, copper, cutlery, teas, drugs,

silks, nankeens, earthenware, and salt. The exports consist of about 15,000 peculs of pepper, of 133⅓ lbs. each, annually, valued at 45,000 dollars, of cotton, wax, dragon's-blood, benzoin, ivory, gold-dust, and edible-nests. The annual export of cotton is about 4000 peculs, which is sold raw, and imported at from 2 to 4 dollars per pecul. The sultan receives a certain sum from every vessel or prow entering the port of Palembang according to its measurement; a large Chinese junk paying about 1500 dollars,—a Siamese junk, which seldom exceeds 80 tons burden, about 75 dollars. The jurisdiction of the port is vested in a chief appointed by the sultan, called the *shabundara;* that of the town by a chief called, in virtue of his office, the *patch,* assisted by other chiefs in cases of difficulty and importance. Before execution every sentence must be submitted to the sultan. Murder is commutable by fine. The chiefs hold by grant from the sultan their seignorial property and authority in their *desas* or provinces; but the greater part of their time is spent in attendance on their lord-superior in the capital. The principal chiefs or *pangerangs,* are generally allied by blood to the royal family; the *mantries* or inferior chiefs are taken from any class of the people at the sultan's pleasure. Chinese, Arabs, and Malays, are found in this class. The *luras* or headmen of the villages are generally elected by the inhabitants themselves, but their choice must be ratified by the sultan. The revenue of the sultan cannot be precisely estimated; the island of Banca yielded him some years ago 150,000 dollars annually on the sale of tin.—From the record of the number of men registered for feudal services, a rough computation would suggest that there are 75,000 souls scattered over its provinces, and 25,000 in the town of Palembang, making a total population of 100,000 souls. There is a description of wild people in the interior of the Palembang dominions who refuse all intercourse with the surrounding population, and are called *Orang Kubri;* they are a harmless and timid race.—The districts and provinces which constitute the sultan of Palembang's dominions derive their names from the principal rivers which flow through them. The most valuable of these is that at the head of the river Moosee, called *Anak Moosee.* The other provinces are: *Mooste, Lamatang, Ogan, Rembang Ogan, Kelida,* and *Kamareeng.*—The island of *Banca,* off this coast, is 130 miles by 45 in breadth. It belongs to this state.

Bencoolen.] The ancient Dutch colony of Bencoolen is situated on the western coast of Sumatra, at the embochure of a small river which discharges itself into a bay inclosing the isle of *Rats.* Its geographical position is in 3° 49′ S. lat. and 102° 17′ E. long. The English established themselves at Bencoolen in 1685 after their expulsion from Batavia, and built Fort York in 1690, and Fort Marlborough in 1719. It then passed into the hands of the Dutch, from whom it was retaken in the early part of the late war, but to whom we have restored it in exchange for their possessions in Malacca. The situation of the town is agreeable; the Europeans occupy well-built houses; but the Chinese quarter—as it is called—is a wretched assemblage of huts, inhabited by 600 or 700 vagabonds. The climate is very bad; the heat varies from 76° to 82°; and the Sumd is considered peculiarly prejudicial to health. The most valuable production of this colony is spices. The spice-plantations were only formed here in 1804, yet they now yield from 50,000 to 60,000 pounds of nutmegs, 12,000 to 15,000 pounds of mace, and 15,000 to 18,000 pounds of cloves. The culture of pepper is declining, but that of coffee and sugar is on the increase. Indigo and cotton appear to thrive well, but

are not extensively cultivated; rice and salt are imported. The surrounding country is governed by three native chiefs, each of them presides over a *campong* or village; but in all cases of importance the Dutch authorities interfere with and control the native administration. The total population of Bencoolen, from Indrapoora on the N. to Croe on the S., is estimated by M. Naruis, in the 10th volume of the 'Batavian Memoirs,' at 80,000 souls, of whom about 12,000 reside in Marlborough and its environs. These latter consist of Europeans, Javanese, Bengalese, Chinese, and Malays.

Menangkaboo.] In the centre of the island is the kingdom of Menangkaboo, the capital of which is called *Pangarooyoong*. The inhabitants are all Mahommedans; and the sultan's power is chiefly founded on the superstitious veneration in which he is held as a sort of Mahommedan pontiff.

Campar.] Campar is an ancient Malayan state on the E. coast of Sumatra, between the rivers *Siak* and *Dancer*. The mouth of the *Campar* river is situated in about 0° 38′ N. lat. and 102° 51′ E. long.; and extends, in a southerly direction, a short distance inland, and then branches off to the right and left. The country on the left branch of the river is called *Campar Kiri*, and that on the right *Campar Kanan*. For 12 or 14 days' journey up each branch, the country is low and flat; the banks on both sides are studded with villages. The principal productions are rice, cocoa, betel nuts, gambier, sugar-cane, and rattans. A considerable trade is carried on betwixt the people of Campar and the interior, and with Singapore. The latter trade is entirely in the hands of the Malays, there being no Chinese settlers here. Coffee is the principal article of export. It appears to be brought a very considerable distance from the interior to Campar on men's heads: perhaps from Menangkaboo and the *Limapulah* country.

Natal.] Natal is situated on the S.W. side of Sumatra, in 0° 18′ N. lat. and 0° 99′ 5″ E. long. The natives of this district are reckoned amongst the boldest and bravest of the Sumatran tribes: they are colonists from Acheen and Menangkaboo. The English have had a settlement here since 1772. Gold dust, which is of very fine quality, is the principal article of export; camphor, opium, gums, china-ware, and cutlery, are the principal imports. Rice is imported from Nias.

Acheen.] The kingdom of Acheen forms the N.W. extremity of Sumatra. It formerly reached as far N. as Indrapoora on the W. coast, but now extends no farther than 40 or 50 miles along the eastern and western shore The inhabitants of the interior form three tribes, called *Allas*, *Reeah*, and *Carrou*. The Acheneese are darker coloured and stouter than the other Sumatrans. They have also a greater portion of sagacity and industry. They profess Mahommedanism. The capital, *Acheen*, is situated upon a river, about two miles from its mouth. It carries on a considerable trade with the natives of the coast of Coromandel.

The Batta Country.] The country of the Battas comprehends the mountainous districts of *Deirah* and *Papa*, to the S. of the plain of Acheen. It is bounded on the S. by Passamman and the independent district of Aru; the northern extremity reaches the Sinkel river, and the southern extends to Tabooyang.

ISLAND OF PULO NIAS.] The island of Pulo Nias is the largest of that chain of islands which skirt the western coast of Sumatra; and is at the same time the most populous and best cultivated. It is about 70 miles

in length, stretching from S.E. to N.W. Its surface is for the most part hilly but not mountainous; it possesses several rivers of considerable size, whose *qualloes* or mouths afford entrance to the vessels and boats used by the natives. There are several good harbours both at the northern and southern end of the island, and there is anchorage for ships almost all along the eastern coast. The general aspect of the country is highly pleasing; the dark sombre hue of undisturbed forest is nowhere to be discovered; the valleys and the sides of the hills are well-cultivated, and the high grounds generally present clumps of trees marking the sites of the villages. The soil is one of peculiar fertility, and even on the declivities of the hills produces luxuriant crops of rice and potatoes. The population is very considerable with reference to the extent of the island, being supposed to exceed 200,000 souls. The natives are an active athletic race, about the middle stature, fair as Asiatics, and with much finer features than the Malays. The nose is prominent, and has somewhat of the Grecian straightness; the eye is peculiarly fine and full. The women are considered the beauties of the Eastern Archipelago, ranking in this respect with the women of Sulo. Their houses are built of wood, and are in general of large size. The entrance is by a trap-door and a ladder in the centre, the houses themselves being raised upon large iron-wood timbers. Their villages are generally placed on defensible situations,—a practice which has no doubt originated in the state of warfare in which they are almost constantly involved; for the natives are divided into numerous independent tribes or clans, between many of which inveterate feuds exist. Their arms consist of a spear, a short sword, and an oblong wooden shield, besides which they generally wear a stiff leathern jacket and a helmet of the same material. The ordinary dress of the common people consists of a baju or jacket, and a cloth rolled round the waist and carried between the thighs; that of the chiefs is more elegant. Red is their favourite colour; and they wear a profusion of gold ornaments, one of which is of peculiar elegance, being a crown in the form of a high Persian cap, with a large peak in front. The women generally display a profusion of this barbaric wealth upon their persons; although their only dress is a piece of cloth rolled tightly round the loins, and extending down to the knees, secured by a broad belt of gold. There is a good deal of difference between the people of the northern half of the island and those of the southern. The former have intermixed more with the Malays and Acheenese, while the latter jealously exclude strangers from settling amongst them. Marriage by *jujus* is universal; and the jujus is very high, varying according to the rank of the parties from 60 or 70 to 500 dollars. The laws of Nias, in regard to adultery, are very severe, the punishment being capital; the number of wives which a man may have is only limited by his means, but few except the chiefs have more than one. The mode of burial in the southern division of the island is peculiar: the body is not committed to the earth, but is enclosed in a wooden shell or coffin, which is elevated on four posts, and thus exposed to the free winds of heaven. Flowering shrubs and creepers are generally planted beneath, and soon climb up and cover the coffin with foliage. These cemeteries are at some little distance from the villages. Rice is the staple export of the country. It is exported to the extent of about 12,000 bags a-year. Hogs are an important part of the domestic establishment, and the most general food of the natives. Neither buffaloes, cattle, nor horses, are indigenous to the island.

Island of Lingga.] Lingga, or *Lingen*, which must now be regard-

ed as the principal possession of the independent Malays, since Djohor and Pahang fell under English supremacy by the treaty of 17th March, 1824, is situated under the equator, betwixt Sumatra and Borneo, to the S.E. of the straits of Malacca, and N.W. from those of Banca, in 104° 40′ E. long. The coasts are in general low, marshy, and covered with thorny shrubs. A chain of mountains intersects the island from W. to E. In the southern part of this chain, one mountain shoots up two pyramidal summits to a great height; the natives believe that this mountain is the haunt of spirits. The climate is variable; showers occur every day, and greatly moderate the heat. There are two monsoons, or *moussins*, as the Malays call them: the Timer from the E. and the Barat from the W. The former blows from April to September, the latter during the remaining months of the year. The chief river is navigable for 3 or 4 leagues by boats; its entrance is defended by an old fortification mounting 20 or 24 pieces of cannon. The forests yield excellent timber, and fire wood, such as *lignum aloes* and *chalcas, paniculata.* The bamboo, however, though so abundant in Java and the Celebes, is rare here. The Chinese inhabitants collect and eat a kind of gummy exudation from the leaves of certain plants, called *gambien.* Rice is little cultivated, and salt is scarce. Gold and tin are said to exist here. The population of this island does not exceed 10,000 souls, two-thirds of whom, including 400 or 500 Chinese, inhabit *Kivala-dai,* the capital. The Malays are well made, and possess pleasant features, but are of small stature. The men wear a robe called *selouar*, which does not descend below the knees, a *sabok* or girdle, and a *badjin*, or short upper coat or vest. Their manners are polite, but dissembling like those of their nation in general. They possess two musical instruments: the *bangsie*, a kind of flute, and the *rabab*, a species of violin with two strings. Their airs are plaintive and monotonous, but not destitute of melody. They manufacture bullets and gunpowder, and fabricate poignards and sabres, equal in beauty and temper to those of Palembang. They trade with Java, China, Poulo Penang, and Malacca; and commit frequent piracies upon the inhabitants of *Sekanah, Baro, Penagan*, and *Tamacug.* They punish theft among themselves with the loss of the hand, and murder with death; but the parent of the murdered may accept of blood-money in compensation.

Authorities.] Marsden's History of Sumatra, Lond. 4to. 1783.—Heyne's Tracts on India, Lond. 4to. 1804.—Anderson's Mission, Lond. 1826.—Crawford's History.—Sumatrae et insularum circumjacentium tabula nova, Amstel.—Arrowsmith's Chart, Lond. 1808.

CHAP. IX.—ISLANDS IN THE BAY OF BENGAL.

THE only groups in the bay of Bengal, which deserve notice, are the Andaman islands, and Nicobar islands.

ANDAMAN ISLANDS.] The group of islands, called Andaman, is situated on the eastern side of the bay of Bengal, between 10° 30′ and 14° N. lat.; and run N. and S., nearly in the meridian of 93° E. long. They lie to the S.W. of the Burmese dominions, and have in all the intermediate space a chain of islets, reefs, and banks, upon which there are soundings, and which offer considerable resistance to the roll of water from the Indian ocean into the bay of Bengal. There are two principal islands. The largest, called the *Great Andaman*, is 140 miles in length,

but not more than 20 miles in breadth. Its coast is every where cut with deep bays, among which are found good harbours. The soil is fertile; and in the forests is found ebony. Wild hogs, monkeys, and rats, are said to be the only quadrupeds; but the sea on the coast abounds with different kinds of fish. The number of natives upon the Greater Andaman and all its dependencies does not exceed 2500 souls; these are dispersed in small societies along the coast, or in the lesser islands within the harbour, never penetrating deeper into the interior than the skirts of the forest. In stature they seldom exceed five feet; their limbs are slender, and bellies protuberant; they have high shoulders, and large heads, with woolly hair, flat noses, and thick lips; their eyes are small and red, their skin of a deep sooty black, and their countenances exhibit the extreme of wretchedness, a horrid mixture of famine and ferocity. They go quite naked, and are insensible to any shame from exposure; in this and some other respects resembling the natives of New South Wales. The climate is exceedingly unhealthy, and the British settlements once made upon these islands have been long since abandoned. —To the E. of the northernmost Andaman is *Barren Island*, which rises to the height of 1800 feet, and contains a volcano; the eruptions are sometimes very violent, and stones of the weight of three or four tons have been known to be discharged from it.

NICOBAR ISLANDS.] The Nicobar islands are situated in the S.E. quarter of the bay of Bengal, almost equally distant from the Andamans and from Sumatra. The largest of the group is named *Sambelong;* but the two most visited by Europeans are called *Carnicobar*, and *Nancoury*. There are nine other islands of moderate size, besides a multitude of very small ones, as yet without any distinct appellation. Most of these islands are hilly; and some of the mountains are of considerable elevation. The valleys and sides of the hills are so densely covered with cocoa and areca-palms, that the sunbeams cannot penetrate through their foliage; and in some places these are so thickly interwoven with rattans and bush-rope, that they appear spun together, which render the woods almost dark. The leaves and fruit falling down, rot below, which contributes to make the islands unhealthy, and absolutely pestilential to a European constitution. Buffaloes, and other cattle, swine, dogs, and monkeys, are found in most of the islands; snakes and alligators are numerous. The number and variety of shell-fish is so great, that here the most beautiful conchological collections might be made with very little trouble.—The inhabitants of the Nicobars are of a copper colour, with small eyes, flat noses, large mouths, thick lips, and black teeth; they are well-proportioned, rather short than tall, with large ears. They have strong black hair; the men have little or no beard, and shave their eyebrows, but never cut their nails. The hinder part of the head is compressed at birth. The occupation of the men consists chiefly in building and repairing their huts, and fishing and trading to the neighbouring islands. The women cook and cultivate the ground. Most of the country ships, from the different coasts of India, touch at the Nicobar islands in order to procure cocoa-nuts, which they purchase at the rate of four for a leaf of tobacco, and 100 for a yard of blue cloth. The hogs are fed on cocoa-nuts, and the pork is excellent. Tobacco is the current medium of all exchange and barter. The Danes formed an establishment on these islands in 1756, but have since abandoned it, owing to the unhealthiness of the climate. The inhabitants do not follow any of the systems of religion prevalent on the neighbouring

continent; but their notions of a Divine Being are extremely perplexed and unintelligible. Their *paters* act in the treble capacity of conjuror, physician, and priest. The Moravians, a body of Christians exemplary for zeal and perseverance, commenced a mission here; but missionary after missionary falling a victim to the climate, they, after enduring many privations, relinquished the undertaking.

Authorities.] Sonnerat, Voyage aux Indes Orientales; Paris, 1806, 8vo.—Asiatic Researches.—Haersel's Letters; Lond. 1813, 8vo.—De Nikobariscke Oers, af B. Prahl.; Kiob. 1804, 8vo.

CHAP. X. CEYLON.

THE island of Ceylon is situated at the western entrance of the bay of Bengal, between 5° 56′ and 9° 46′ N. lat., and 79° 36′ and 81° 58′ E. long. On the N.W. it is separated from the Coromandel coast by the gulf of Manaar, and is distant about 160 miles from cape Comorin. On the S. and E. it is washed by the great Indian ocean. From Point Pedro at the northern extremity, to Dondra Head in the southern, the extreme length is about 270 miles. The breadth is unequal, extending from 40 to 50, and in some parts from 70 to 140 miles. The whole island has very much the shape of a pear, lying N. and S., with the larger end towards the S. Its superficial area is about 27,000 square miles. The name from which the modern one is formed is *Singhala*, that is, 'the country of lions,' which may have been intended as descriptive of the disposition of the people, as the lion has not been met with upon it at least in modern times.

Historical Notice.] Little is known of the history of this singular island before the arrival of the Portuguese under Almeida, in 1505. The natives, long harassed by the attacks of the Arabs, readily consented to pay a tribute in cinnamon to these Europeans, in consideration of being assisted against their Arab invaders. At this period some savages called *Veddahs*, or *Beddahs*, occupied the woody regions; the rest of the island was possessed by the Cingalese. Not content with a friendly alliance, the Portuguese endeavoured to form a settlement in the island, in which they succeeded, after a long and severe struggle. The sea-coast fell into their hands, and the interior remained to the original possessors. After the lapse of nearly a century, the Dutch found their way to the East and reached this island in 1603. They were favourably received by the oppressed natives, and being assisted by them, after a sanguinary struggle of nearly 50 years, at last overpowered the Portuguese, who yielded the dominion in 1656. The conduct of the successful allies, however, soon proved as offensive to the natives as that of their predecessors; and hostilities of a long duration took place, in which the Ceylonese were eventually driven to the mountains and jungles of the interior, where alone they could preserve their independence. A treaty was at last concluded between the two parties in 1766, which left to the native king of Candy at least the name and somewhat of the appearance of royalty. The progress of the American war brought the British to this island; but their arms, though victorious, were not rewarded with permanent success, till the contest with revolutionary France and her allies induced our government to despatch a new and powerful expedition against Ceylon, which took possession of it in

1796. Since that period, various transactions have occurred between our countrymen and the Candians. A treaty of alliance and commerce was projected in 1800, but failed. Our troops took possession of their country and capital in 1803; but, being unable to maintain their conquests, were forced to capitulate, on condition of liberty to return to Columba. In place of the terms of surrender being observed, however, they were treacherously put to death with circumstances of the most savage cruelty. An expedition of 3000 men, fitted out in 1815, under the command of general Brownrigg, in concert with the population, who had become weary of their tyrannical and blood-thirsty monarch, entered Candy in triumph, and deprived the native monarch of all power. In 1817, a harassing rebellion broke out in the central provinces which lasted until the end of 1819, since which period uninterrupted peace has prevailed, and various improvements, fiscal, judicial, and commercial, have been executed. The whole island may now be regarded as a British colony, not under the East India company, but under the crown, and thus having its ports and commerce open to the whole British people.

Physical Features.] From the sea this island presents a fresher green, and more fertile appearance, than most parts of the Coromandel coast, the nearest point of which is about 65 miles distant. From the termination of this point, on the S. side of the river Vaygaroo, all the way to the coast of Ceylon, there is a succession of banks and shoals known by the name of *Adam's Bridge*, because the natives, who believe that this island was paradise, describe these as the footsteps of the first man, when, after the fall, he fled thence to the continent. The sea to the southward of this chain of shoals gets the name of the *Manaar Passage*, from an island of that name at the termination of the chain upon the coast of Ceylon. The eastern shore is bold and rocky, and the water deep. The N. and N.W. is flat, and indented with lagoons and inlets from the sea, several of which form small harbours; but the N.W. coast is so full of sand-banks and shallows, that it is impossible for vessels of a large size to approach it. The principal harbours for large ships are *Trincomalee*, on the N.E., and *Point de Galle*. The interior of the island abounds with steep and lofty mountains, covered with forests, and full of almost impenetrable jungles, which completely surrounded the dominions of the king of Candy. Hills rise over each other here in successive ridges and chains. The most lofty range of mountains,—having an elevation of from 4000 to 5000 feet,—divides the island nearly into two parts, and so completely separates them from each other, that both the climates and seasons differ on the respective sides. These mountains also terminate the effect of the monsoons, which set in periodically from opposite sides of them, and are connected with those on the Coromandel and Malabar coasts, and very nearly correspond with them. There are no lakes among the mountains of Ceylon; and the rivers, generally speaking, are small, and have their courses from the mountains to the nearest sea. To this, however, there is one exception,—the river *Mahavelly*, which rises on the N. side of Adam's Peak, has a course of about 35 miles direct N. to the city of Candy; thence bends to the E. for about 35 miles; after which it flows N. to the sea about 70 miles more, and empties itself by three principal mouths, two of which enter the bay of Trincomalee. This river is navigable, at least to Candy. Another small river, the *Calany*, rises on the W. side of Adam's Peak, and falls into the sea at Columbo, but is navigable only during the rains.

Climate.] On the W. side, where Colombo lies, the rains prevail in

May, June, and July,—the season in which they are felt on the Malabar coast. During their continuation, the northern parts of the island are little affected, and are generally dry. In the months of October and November, when the opposite monsoon sets in on the Coromandel coast, it is the N. of Ceylon which is affected, and scarcely any impression is made in the S. The climate is unhealthy in the interior; but every point of the sea-coast that is cleared of wood, and drained and cultivated, is salubrious; the mean annual temperature here may be stated at 80°. Colombo and its neighbourhood, being the best cultivated, are particularly so. It is now, indeed, well known, that healthiness of climate does not depend on the situation of places, as to their parallels of latitude; and that a healthy state of the human constitution is not incompatible with the most intense heat of the sun,—on the contrary, that it is more adapted to an equatorial than a polar climate, provided the atmosphere be not overcharged with humidity. There are no volcanoes on the island.

Productions.] A mere catalogue of the valuable and useful productions of this island would require more room than we have to spare. With some few exceptions, all the productions of which India and the Indian islands can boast are to be met with here; besides many others peculiar to itself. The tribe of the palms,—the most common, and at the same time the most magnificent and beautiful of eastern vegetation,—may be considered as the most generally useful to the Ceylonese. Among these the cocoa-nut tree unquestionably holds the first rank. It supplies the inhabitants with bread, milk, and oil; it affords them a strong spirit, vinegar, and yeast; its top is an excellent substitute for cabbage; it furnishes timber to build their huts, and thatch to cover them; the shell of its nut is no mean article in the scanty catalogue of their household utensils; and it supplies them with cloth and cordage. Of the other members of this vegetable tribe we can only barely enumerate the following: the palmyra, areca catechu, sago palm, talipot palm, and the bread-fruit tree. Pine-apples, oranges, lemons, mangos, plantains, almonds, pomegranates, and other fruits are plentiful and excellent. The bark of the *laurus cinnamomum* is the chief export. Its growth is confined from about the middle of the W. coast to a little beyond Dondra-head on the S. The seeds of all European plants degenerate rapidly.

Ceylon is less rich in the animal than in the vegetable part of the creation, if we except its ornithology, but it boasts of the largest and finest elephants in the world, great numbers of which are caught and exported. Among the woods and jungles the ferocious buffalo is found, and tamed with difficulty. The large striped tiger of India is not met with in Ceylon. The elk, stag, and deer abound. Birds of the most splendid and beautiful plumage enliven the woods and thickets; amongst these are the gaudy peacock, the untameable jungle fowl, a great variety of the pheasant family, also parrots, pigeons, wood-peckers, and paddy birds. It need scarcely be added, that all the noxious and disgusting classes of insects and reptiles are abundantly generated here amid the heat and moisture of the rich vegetable soil. Venomous toads, scorpions, cockroaches, musquitoes, red, black, and white ants—the most numerous of the whole insect tribe—infest every house. Snakes, too, are not wanting, and these of the most poisonous kind. Alligators of a prodigious size infest the rivers, and the marshes abound in leeches.

The minerals are numerous, and precious stones, especially amethyst, rubies, and cat's eye, are abundant, but not of a fine quality. The great

mass of the Ceylon rock is of primitive formation, granite, or gneiss. The rocks along the shores are in general sandstone.

Population.] The total population of the island is stated by Cordiner—on what authority we know not—at 1,500,000 souls; of whom, the Cingalese, the Candians, and the Malabars, each constitute 500,000. "The first," he says, "occupy the coasts of the southern half of the island, from Dondra Head to the confines of Batticoloe on the east, and to the river of Chelau on the west; the second are shut up in the heart of the country; and the Malabars occupy the northern parts of the coast." Mr Bernard, who resided for upwards of 25 years on the island, and had official opportunities of making himself acquainted with its statistics, expresses himself thus on the subject of its population: "The common opinion of those that I have conversed with is, that the population of Ceylon amounts to 2,000,000 of inhabitants; 1,000,000 in the territory that is now in possession of the British government, and another in that which belongs to the king of Candy. This estimate, however, is likely to be exaggerated. An enumeration, as correct as possible, was made in the year 1789, by the order of governor Vander Graaff, of all the inhabitants in the territory of the Dutch East India company, and that reckoning gave 817,000 inhabitants. With regard to the Candian provinces, the population is numerous in those that are cultivated, but it must be remarked that, with the exception of the country immediately surrounding the town of Candy, and the provinces of Ouva and Mattele, all the interior of Ceylon is, in the proportion of seven-eighths, covered with woods and forests; and, therefore, it may be concluded that this part of the territory of the king of Candy is, in proportion to its extent, even more thinly peopled than the country under the British government. The Wannyships of Soerlie and Nogerie, and the whole of the great forest occupied by the Weddas from Maagame on the S., to the Cohlay river at the northern side of the island, does not contain 10,000 inhabitants. These reflections will lead to a conclusion that Ceylon does not contain more than 1,500,000 inhabitants."

We have the testimony of all writers on Ceylon, that the Cingalese, or Ceylonese, are a mild, timid race of men, exceedingly civil to strangers, studious to oblige, and delighting in acts of hospitality. Their stature is rather below the middle size; their limbs slender, but well-shaped, and in good proportion; their features more resemble Europeans than any other people of Asia; their colour is as various as the tints of bronze, but less deep on the whole than that of the Hindoos; their eyes are dark; and their hair long, smooth, and jet black; they turn it up and fix it with a tortoise-shell comb on the top of the head. A piece of calico or muslin wrapped round the waist is the only clothing worn by nine-tenths of the population. The addition of short jackets, waistcoats, ruffles, ear-rings, caps, swords, &c. is regulated by the oppressive system of castes which, with the exception of China and Japan, appears to have pervaded all those countries where the doctrines of Buddha and Brahma have found or forced their way. The *Moodelliars* and higher orders of Ceylonese profess Christianity, and have adopted many European customs, restricting themselves to one wife, and marrying according to the forms of the Dutch church. A considerable number of the lower orders continue votaries of Buddha; and many have embraced the Mahommedan faith. The Cingalese have a language and written character of their own.

Modern writers talk of the Cingalese and Candians as two distinct races of people: we are unable either to confirm or disprove this. Knox,

who knew the Candians well, thus describes them : " In carriage and behaviour they are grave and stately, like unto the Portuguese; in understanding quick and apprehensive, in design subtle and crafty, in discourse courteous, but full of flatteries; naturally inclined to temperance both in meat and drink, but not to chastity; neat and provident in their families, commending good husbandry. In their dispositions not passionate, neither hard to be reconciled again when angry. In their promises very unfaithful, approving lying in themselves, but disliking it in others; delighting in sloth, deferring labour until urgent necessity constrain them; neat in apparel, nice in eating, and not given to much sleep." They are all extremely poor, and appear to be content with very little; their dwellings are mud huts, and their furniture scanty; fruit and rice are the principal articles of their food, and water is almost their only beverage. Like the Spaniards of Valencia, they pour it from a spout at a considerable distance from their mouths, that the vessel may not be defiled by touching the lips. Their chief luxuries are the betel-leaf, areca-nut, and chunum. To present betel is throughout the East the symbol of friendship,—it is the calumet of peace. The men labour but little; the women rather more, but not much. Rice, millet, and pulse, are the principal articles that cost them any labour in raising, and even of these they do not cultivate much, for the rest they depend on the natural productions of the soil. " The possessor of a garden," says Cordiner, " which contains twelve cocoa-nut trees, and two jack-trees, finds no call for any exertion. He reclines all day in the open air, literally doing nothing; feels no wish for active employment, and never complains of the languor of existence."

There is a race known among the original Cingalese by the name of *Meddahs*, or *Veddahs*, who live in a free and independent state in the inaccessible mountains and forests of Bintan, behind Batticollo. They seek their food in the deep forests, abounding with elephants, buffaloes, wild hogs, elks, and antelopes. They cautiously abstain from all connection with the rest of the islanders, except in bartering with the borderers of their forests, ivory, deer skins, dried flesh, and honey, for salt, arrows, cloth, and a few other articles. They are a robust and hardy race, courageous and resolute, but very treacherous. Their language is a dialect of Cingalese; and the faint notion which they have of religion approaches nearer to Brahmanism than to Buddhism. Their only places of worship are under the shade of the banyan-tree.

The next class of inhabitants, who were reckoned to form one-half of the population of the British possessions before the addition of the Candian dominions, are the Malabars,—the same active, enterprising, crafty people, in their character of merchants, pedlars, jewellers, workers in metals, tailors, fishermen, jugglers, as we find them on the continent from which they came. About one-half of these people are indifferent Mahommedans; the other half are worse Hindoos. They chiefly inhabit the district and city of Jaffnapatam.

The Malays, who are found on almost every island in the Indian seas, are here pretty numerous; they are soldiers, sailors, fishermen, and artificers; many of them were introduced by the Dutch in a state of slavery. Among the various nations who inhabit Ceylon, the Malays are the only people out of which we have been able to make soldiers.

The number of Dutch in the island does not exceed 900; with the exception of a few families, they have been reduced to comparative indigence by our capture of the island.—Of the Portuguese who first opened the

way to India little now remains but the ruins of their former grandeur. Their name, language, religion, and religious establishments, still exist; but the Portuguese themselves have disappeared. Slavery is still permitted in Ceylon, in consequence of the existing slaves of the Dutch and natives at the period of the capitulation to Great Britain, being declared private property. The number of slaves may amount to 8,000.

Religion.] The language and religion of the Candians, or Ceylonese Proper, are the same as the Siamese, from whom, as we have noticed, they consider themselves descended. The religion of Brahma is said to have prevailed in Ceylon till the sixth century B.C., when that of Buddha obtained the ascendency. Many of the towns and villages yet retain the name of Hindhu deities, and the ruins of their temples are yet seen surrounding modern edifices of worship constructed to Buddha. In the year 1811, the number of temples dedicated to Buddha, and other inferior deities of Cingalese superstition, amounted to 1,200. In Ceylon, the distinction of castes is perhaps more minute than in any other country into which the religion of Brahma or Buddha has found or forced its way. Every profession forms a particular caste under its own headman,—gold and silver-smiths, fishermen, barbers, washermen, manufacturers of *jagery*, drawers of toddy, makers of lime, &c. are all enrolled in distinct and separate castes.

Christianity was introduced into Ceylon by the Portuguese. The Dutch were very zealous in their exertions to bring over their Ceylonese subjects to the Protestant faith, and with that view translated and printed the scriptures in the Cingalese and Malabar dialects. In 1811, the number of native protestant Christians was ascertained to be 146,000, and those of the Catholic denomination 37,649. Of these about 50,000 speak the Tamul language; the majority employ the Cingalese; and a few speak the corrupted Portuguese, so common over all the coast of India. The British and Foreign Bible Society, and the American, Baptist, London, Church of England, and Methodist Missionary Societies, have recently turned much of their attention to this populous island, and under the auspices of the first of these, various editions of the scriptures have been published in the native dialects; and it is remarkable that the priests of Buddha have shown great readiness in assisting the translators of the sacred volume.

Imports and Exports.] The grand article of importation to Ceylon is rice, the value of which frequently exceeds half the amount of the whole goods exported; and the next in consequence is cotton-cloth; yet the soil of the island is capable of producing a redundant quantity of the finest cotton. Hemp is raised abundantly, the sandy soil of the maritime provinces being well-adapted for its cultivation. The cultivation of the sugar-cane on a large scale has been twice attempted, and each time failed. From the toddy of the cocoa-nut tree arrack is distilled by the common still, in the same manner as brandy from wine. From 400 gallons of toddy, 50 gallons of arrack are drawn, equal in strength to brandy 25 London under proof, which when rectified produces half the quantity of strong spirit. Compared with Bengal rum, Ceylon arrack is admitted to be the most wholesome liquor, and it is 30 per cent. cheaper. In 1813, the total value of exports from Ceylon was 2,443,940 rix-dollars (eleven and a half to the pound sterling); of imports 6,378,739 rix-dollars; but of this last two-thirds was rice, it having been a year of scarcity. The total tonnage of all descriptions belonging to the island was estimated at 8,000 tons.

Revenue, &c.] The public revenue of Ceylon may be divided into two branches: viz. one derived from certain productions of the island reserved by government to the fiscal resources,—the other, such imposts as the land-tax, taxes on property, taxes on consumption, and capitation taxes. Of the reserved productions cinnamon is the most important, but of the net profits no official document has recently been published; the pearl-fishery in 1814 yielded £64,000; the fishery of chank shells (a species of large buccinum which are sawed into female ornaments for the wrists, &c.), and madder root, are also productive sources of revenue. The taking of elephants, formerly so lucrative to the Dutch, is no longer considered of any importance, the value of the animal having fallen so much in price. The government share of the crop differs so greatly as from one-tenth to one-half, and is received in kind. In 1812, it amounted to 513,174 rix-dollars. No grants of land are permitted to be made by government to British subjects, or to European settlers on the island. Salt is one of the most productive sources of revenue, and promises to yield a considerable augmentation. In 1812, the total amount of the public annual revenue of every description was 3,028,446 rix-dollars (£263,343); the total expenses to 3,339,726 rix-dollars; deficit 371,280 rix-dollars. The establishment of civil servants, forty in number, fill a gradation of offices to which salaries are attached of from £500 to £3,000 per annum, and after a residence of twelve years are entitled to retire on pensions of from £400 to £700 per annum.

Topography.] *Jaffnapatam*, built on a tongue of land, in 9° 36′ N. lat., and 79° 50′ E. long., is a great resort of the Dutch families: the province itself comprehends rather less than one-fourth of the whole island, and has several small islands attached to it. For a part of the distance between Jaffnapatam and Manaar, it is not very easy to say whether the country is sea or land. The surface is water; but it is in general so shallow, and the bottom under it so firm, that it can be walked over.—Still farther south, on the coast opposite to Coromandel, there is a singular peninsula, *Calpenteen*, which lies parallel to the shore, from which it is divided by a very narrow portion of water, which extends from the isthmus, at the S. end, between 60 and 70 miles. This peninsula, though sandy, is thickly covered with cocoa-nut trees and palmira palms; and the country on the other side of the bay, or, rather, natural ditch, is very rich and beautiful. This curious peninsula extends south as far as *Chilaw*, a distance of about 150 miles from Jaffnapatam; and along the whole of that line of coast, no mountains are visible from the sea—verdant woods forming everywhere the boundary of the horizon. After passing Chilaw southward, the mountains begin to make their appearance, while the coast retains its beauty, and indeed gets more luxuriant in appearance as Columbo is approached. At *Negombo*, about 40 miles to the N. of Colombo, the cinnamon country begins, and it extends to a considerable distance south of that city.—*Colombo* is a very beautiful place, with proper attention to avoiding the direct action of the sun, very healthy, and it contains a number of inhabitants. The city itself is nearly insulated by water, but the land immediately across the lake is the most rich and picturesque that can be imagined. Small vessels only can approach the shore at Colombo, and while the S.W. monsoon blows, ships cannot ride in the roadstead, but must either leave the island altogether, or pass round to Trincomalee. For every thing that can make the earth delightful and desirable, it is hardly possible to imagine a place superior to the neighbourhood of Colombo;

but on the peninsula the water is brackish. According to Cordiner, we may set down its population at 50,000 inhabitants. The part inhabited by the principal Europeans is surrounded with a regular fortification, on one side resting on the sea, the other on an inland lake; the streets are at right angles, shaded by rows of trees, chiefly the showy and elegant portia or tulip tree; the houses are low, but neat, fronted with verandas and Venetian blinds before the windows. Without the fort is the *Pettah*, or black town, and the bazar, or market. Here people of all nations, languages, manners, and religions, are blended together—Dutch, Portuguese, and English; Cingalese, Malabars, and Moors of every class; Hindoos, Gentoos, Parsees, Arabs, Malays, Chinese, Javanese, Buggees, Caffres, half castes, and mongrel breeds of every shade and tint of colour, from the sickly white of the European to the jet black of the African.—South from Colombo the cocoa-nut trees get still more plentiful, and the formation of cables of the fibres is one of the staple manufactures of some of the villages on the coast. This richness and beauty continue along the whole of the south-west and south; and there is then the advantage of at least a tolerable harbour at *Point de Galle*, a few miles W. of the southmost part. —The province of *Matura*, in the extreme south, is also celebrated for its scenery, the groves and thickets there alternating much more with open glades than in other parts of the island.—*Dondra Head*, the southmost part of the island, lies a few miles to the E. of the little town of Matura; and a few miles inland, there is a single block of stone (*Mulgurelenna*) 300 feet in height, with a flight of 545 steps, of great antiquity, winding to the summit, which is crowned with a tomb, or temple, of Buddha, in the shape of a bell. After passing the south point, the character of the coast changes much for the worse. It is unhealthy, covered with wood, broken by salt marshes, and infested with wild beasts. Even this country, were it properly cleared, would be very fertile, and probably much improved in point of healthiness; but in its present state, neither cultivated plants nor domestic animals are safe, the elephants attacking the former, and the beasts of prey the latter. This general character of the coast continues all the way to *Trincomalee;* and thence to Jaffnapatam it partakes of the character of the coast immediately to the south of that settlement. The town of *Mantotte*, now in ruins, is said to have been the capital of a kingdom founded by the Brahmins, who had possession of almost all the northern parts of Ceylon, including Jaffnapatam. Contiguous to Mantotte is an immense reservoir, called 'the Giant's Tank;' it is 16 or 18 miles in extent, and would hold, if in repair, a supply of water sufficient to irrigate all the rice-grounds around it. At the distance of about nine miles from this tank, an embankment, constructed of immense stones cemented with lime, has been laid across the Moesely or Aripo river, in order to collect the water, and lead it by means of canals into the Giant's tank. The length of this dam is 600 feet; its breadth in some parts 60, in none less than 40 feet; and its height from 8 to 12 feet.[6] The city of *Candy*, the

[6] These works indicate the ancient existence of some powerful and populous nation in the island, an opinion which is farther confirmed by the astonishing works around the lake of Candeley, distant about 16 miles from Trincomalé. This lake, which is nearly 15 miles in circumference, is embanked in several places with a wall of huge stones, each from 12 to 14 feet long, and broad and thick in proportion, laid regularly one over the other. At one point in this majestic work two hills are joined together in order to collect the water of the lake by an embankment nearly 150 feet in breadth at the base and 30 at the summit. In this part of the wall arches are to be seen; and over these, in the work which is under the level of the water, an opening is made exactly resembling the conduttori used by the Romans in some of the lakes of Italy, for

capital of the native rajah, is situated in the province of Tallanour, surrounded on all sides by lofty mountains, whose sides are covered with thick jungle. It is about two miles in length, and consists of a number of mud-built houses, surrounded by a mud-wall. The only buildings of any consequence in Candy are the temples of Buddha and the royal palace which is a square-built edifice of immense dimensions.

Political Importance.] There is no doubt that the possession of Ceylon was turned to good account by the Portuguese and Dutch, although its expenditure exceeds its revenue at present, and a vote of supply is annually made by parliament for the support of our Ceylonese establishment. The resources of this valuable island have not yet been opened up. At present they want capital to call that labour into action; but if a liberal system of colonization is pursued towards it this want will be speedily supplied, and the deficit in its finances made up. But it is not in a commercial view alone that we are to estimate the value of this possession, which is one "that," says M. Bartolacci, "in the event of a great reverse of fortune on the continent of India, would still afford us a most commanding position, invulnerable by the Indian powers in the peninsula, and yet so situated as to give us the greatest facility of regaining the sovereignty of that country."—"The harbour of Trincomalé is open to the largest fleets in every season of the year, when the storms of the S.W. and N.E monsoons render impracticable, or very dangerous, the approach to other parts in India. This circumstance alone ought to fix our attention to that spot, as peculiarly adapted to be made a strong military depot, and a place of great mercantile resort, if a generally free trade becomes effectually established from India to other parts of the world. It ought farther to be observed, that the narrowness of the channel which separates the island of Ceylon from the continent of India, and the position of Adam's Bridge, which checks the violence of the monsoons, leaves on either side of it a calm sea and facilitates a passage to the opposite coast at all times of the year. A respectable European force stationed at Colombo, Jaffnapatam, or Trincomalé, can, in a very few days, or hours, be landed on the Malabar and Coromandel provinces." The possession of such a station as this, among the rich islands of the vast Indian archipelago, is of the utmost importance to a commercial nation.

The earliest account, in our language, of this interesting and important island, is an exceedingly amusing and instructive narrative, written by Robert Knox, who, in the year 1659, was kidnapped by the king of Candy, and detained 19 years in his dominions. The narratives of Mr Percival and Mr Cordiner, were both published since the commencement of the present century, and will be found to contain a great deal of correct and interesting information. A variety of valuable information respecting this island and the inhabitants has been furnished us, in the reports of our Bible and Missionary societies; but the most valuable work that has yet appeared on Ceylon is Mr Anthony Bartolacci's view of its agricultural,

letting out the water, perhaps for the purpose of irrigation. Nor can we omit to mention a singular monument, discovered by Mr Sowers, collector of Batticaloe, in the year 1810, in the centre of a very thick forest. It is supposed to have been a Boodha pagoda, reared, like the Egyptian pyramids, in honour of the dead. The size of the building is gigantic; the basis of its cone is about a quarter of a mile in circumference, and on the tops and sides large trees have fixed their roots among the ruins, and that up to the height of 50 or 60 feet. It is surrounded by a square inclosure, a mile in circumference, consisting of a broad wall, made of brick and mortar, and having within it a number of cells.

commercial, and financial interests, published in 1817, and accompanied by a very large and comprehensive map from the latest surveys.

ADJACENT ISLANDS.] *Ramiserum*, the holy island of Rama, is situate at the northern extremity of Ceylon, about 20 miles from the shore. It is a low flat island, about 20 miles in circumference, and may be considered as the most southerly pier of that series of shoals and coral-rocks which, under the name of Rama's or Adam's Bridge, serves to connect Ceylon with the coast of Coromandel. The whole island is dedicated to the purposes of religion; no plough is allowed to break the soil, and no animal, either wild or tame, to be killed within its precincts. It is inhabited chiefly by priests, who are supported in luxury by the produce of certain lands in Coromandel, and the donations of pious individuals; and by immense crowds of pilgrims, jugglers, and beggars, who resort to it from all parts of India, to implore absolution for their sins, or to take advantage of the momentary charity of the richer penitents. It is adorned with a multitude of beautiful temples, besides an immense pagoda, which forms the chief object of curiosity and veneration. The number of pillars within this temple amounts to 2,628, and some idea of its extent may be formed from the admeasurement of its surrounding walls, (between which and the building itself there is but a small vacant space,) which is 830 feet from E. to W., and 625 from N. to S. There are upwards of 200 Brahmins attached to this temple, which is for the most part of recent construction, the ancient fabric having been almost entirely demolished by the Mahommedan conquerors.

DELFT, one of the cluster of islands adjacent to Jaffnapatam, has been almost entirely set apart under government for the growing of *hane* or hemp, and manufacturing it into cordage. A valuable breed of horses is also reared upon it.

Authorities.] Campbell's Account, Lond. 1798, 8vo.—Perceval's Account of Ceylon, Lond. 1803, 4to.—Cordiner's Description of Ceylon, Lond. 1807, 2 vols. 4to.—Asiatic Researches.—Lotgevallen door J. Haafner, Haarlem, 1806, 8vo.—Valentia's Travels, Lond. 1809.—Reise nach Ceylon etc von J. C. Wolf, Berl. 1782-4, 2 vols. 8vo.—Bertolacci's Statistical Account, Lond. 1817, 8vo.—Davy's Account of Ceylon, Lond. 1821, 4to.

CHAP. XI.—THE MALDIVES AND LACCADIVES.

THE *Laccadives* are a group of islands in the Indian ocean, 75 miles to the W. of Malabar. They are divided into 15 smaller clusters, each of which contains two or more islands, and several rocks and dry uninhabited spots; but the largest of them does not contain above six square miles of land, and they are surrounded by dangerous coral reefs. The soil is rocky, and yields no grain; their only produce is poultry, eggs, cocoa-nuts, betel-nuts, and plantains. The inhabitants are inoffensive, and not so shy as their Maldivian neighbours. They subsist on cocoa-nuts and fish, and manufacture a kind of sugar from cocoa milk. Their numbers are about 10,000, scattered over 19 islands. They are of Arabian origin, and profess Islamism. They are called *Moplays* by the inhabitants of the Deccan. These islands were discovered by Vasco de Gama in 1499, but are politically dependent on Canara, and under the dominion of England. They are seldom visited by European ships, on account of the intricate naviga-

tion. Ships may, however, safely take in refreshments at *Kan Rattea*, in 10° 34′ N. lat. and 72° 56′ E. long. There is also a good harbour in the isle of *Kalpeny*. The Laccadives extend between the 10th and 12th parallels.

To the S. of the Laccadives, and extending between the 8th degree of N. latitude and the equator, are the *Maldives*, or *Male-Dives*, consisting of numerous *attollons* or circular clusters, inclosing interior smooth shallow seas, and surrounded by chains of coral rocks, in general level with the water, and running from half a mile to within 50 yards of the land. In some parts of these reefs there are openings sufficient to admit boats; and where bays are formed by projecting parts of the clusters, there is anchorage over a sandy bottom mixed with shells and coral. Many of the islands furnish fresh water a few feet from the surface of the soil. The whole are covered with cocoa-trees and a thick growth of underwood. The most northern islands of the groupe are the most fertile and salubrious; ambergrease and coral are collected in great abundance on the shores; an important fishery of cowrie-shells is also carried on. At one time a vessel or two from the British settlements used to visit the Maldives to load cowries, but owing to the unhealthiness of the climate, and the long detention, these visits were discontinued, and the trade is now carried on with Balasore, in Orissa, by native vessels. Ships from Eastern India sometimes resort to the Maldives to procure sharks' fins for the Chinese, who esteem them an excellent seasoning for soup.—The Maldivians appear to be of Malay origin. Some consider them as a melange of Hindoos and Arabs. According to their own traditions, their ancestors arrived from the Malabar coast some centuries ago. Their language appears peculiar to themselves; but many of them can speak Hindostanee. They are well-made, and of an olive complexion, with bushy beards. They profess Islamism, and the more learned among them speak Arabic, and expound the koran. It is said that national animosities long stirred up violent wars between the inhabitants of the Maldives and Laccadives; but that since the sovereign of the Laccadives came under British control, these disputes have ceased. A plurality of wives, but no concubines, is allowed, yet adultery and fornication are hardly ever known. The women are extremely industrious, and generally employed in spinning or dyeing cloth, twisting cois or cocoa fibres, picking cowries, or managing their domestic affairs. They dress very modestly in garments of cotton, and sometimes of silk, brought close round the neck, with long sleeves, and flowing to the ancles.—*Mall*, in 4° 20′ N. lat., is the seat of government. It is nearly circular, and not above three miles in circumference. The island is fortified all round with works mounting 100 pieces of artillery. The town extends over the whole island, and is remarkably neat and clean. The houses are built generally of wood and mats; some of the richer traders have stone houses, and the sultan's house is a low stone building regularly fortified. The government appears to be despotic, and hereditary in the family of the sultan; but he has a ministry composed of eight chiefs or viziers, who have islands assigned them for their support while in office. The chief priest is called *pandiar*. No European settlement has yet been effected on these islands.

AMERICA.

GENERAL INTRODUCTION.

EASTWARD of Asia, westward of Europe and Africa, between the Atlantic and Pacific oceans, lies the great continent of America, next to Asia the largest of the five general divisions of the globe. It extends from Cape Horn, in 55° 58′ 30″ S. lat., to an unknown northern latitude, and from the 55th to the 165th degree of E. long. It is upwards of 9000 miles in length, and from 1500 to 1800 in average breadth. Templemann has estimated its superficial area at 14,323,000 square miles; Balbi at 14,622,000; and Gräberg at 15,737,000.

Divisions.] The continent of America is naturally divided into two portions, which almost merit the distinction of independent continents, being only separated from each other, under the 9th parallel, by the isthmus of Panama, or Darien, which is in some places not more than from 40 to 50 miles broad. These two great general divisions of this continent are distinguished by the names of NORTH and SOUTH AMERICA. Between these two divisions lie the WEST INDIA ISLANDS, extending from the gulf of Mexico, and the Caribbean sea, into the Atlantic.

NORTH AMERICA includes *Greenland* belonging to Denmark,—*British America*, which comprises *New Britain*, *Upper Canada*, *Lower Canada*, *New Brunswick*, and *Nova Scotia*,—the *Russian possessions* in the N.W., —the *United States*,—*Mexico*,—and *Guatimala*.

SOUTH AMERICA comprises *Colombia*, *Guiana*, *Brazil*, *Peru*, *Bolivia*, *Chili*, *Buenos Ayres*, *Paraguay*, the *Banda Oriental*, and *Patagonia*.

Whether we consider the magnitude of this continent as a whole,—the scale upon which all the great features of its natural geography are constructed,—the recent period of its discovery,—the character and institutions of its aboriginal inhabitants,—or the social institutions to which it has given birth,—America, in both hemispheres, presents a most interesting field of inquiry to the naturalist, the philosopher, the politician, and the merchant.

General Aspect.] When we cast our eyes on the Western world, the first thing which strikes us, besides its extraordinary magnitude as a whole, is the large forms in which Nature has cast its different physical features. Its rivers are large and rapid beyond those of the ancient continents; and after falling into the ocean, they give rise to currents which are perceptible at a very great distance from their mouths. The *Maranon*, the *Orinoco*, and the *Plata*, in South America, and the *Mississippi* and *St Laurence* in North America, are all conspicuous for the width of the channels in which they flow, and the prodigious mass of waters which they each contribute to the ocean. There is no chain of mountains on this side of the globe,—the Himalaya excepted,—which, in extent and altitude, can be compared

with the *Andes* of South America; the Alps themselves dwindle into insignificance in the comparison. The plains, likewise of the new world are as extensive and beautiful as its mountains are elevated and grand. In some places, and at certain seasons of the year, the eye of the traveller in vain attempts to scan the farthest verge of the plain which stretches its monotonous expanse before him like some vast ocean; in other quarters the whole country is one wide rich savannah, teeming with vegetable life, and clothed in the fairest hues of creation. Its lakes are equally remarkable. In North America a chain of lakes extends from E. to W., each of them an inland sea in magnitude; and the lakes even of a third class, in America, equal, if they do not excel, any feature of this kind of which the Old world can boast.

The great leading features in the structure of the New world are: 1*st.* The continuous belt of high mountains and plateaus traversing the western border, from Behring's straits to Terra del Fuego, and forming the most uninterrupted extent of primitive mountains known. Their northern portion, consisting of the *Rocky mountains*, appears to be chiefly granitic; while in the *Cordilleras* of Mexico, and the *Andes* of South America, the primitive strata are, for the most part, covered with immense accumulations of transition-porphyries, trachytes, and lavas, the produce of numerous volcanoes, many of which yet remain in constant activity. *2dly.* The wide expanse of low and generally level country which succeeds, immediately on the W., to the above-mentioned zone of mountains; and through which, in both hemispheres, flow some of the most magnificent rivers in the world. This region consists of immense deposits of newer rocks, over which is strewed every where, as with a mantle, the alluvial formation, or a covering of sand and gravel, with which are intermingled rolled masses of rock. *3dly.* The chain of mountains, of lower elevation and inferior continuity, which forms the eastern boundary to the low country, and whose principal masses and highest points are composed of granite. *4thly.* The magnificent inland collections of water. *5thly.* The clusters of islands occupying the seas between North and South America, and which are, almost without exception, of a volcanic origin. The geological character of America partakes of the simplicity observable in her great mountain-ranges, which obey very uniform laws of arrangement, and are in a great measure free from those interruptions which occur in Europe, arising out of numerous chains, whose irregular, and often contradictory structure—as geologists would say—it is frequently difficult to reconcile or explain. The two continents, however, agree in the prevailing primitive character of their northern extremities, and in the occurrence of volcanoes about their equatorial and southern regions; and an investigation of their geological relations affords no ground for the opinion that the New world is of more recent origin than the Old.

Rivers.] Malte Brun supplies us with the following table of the length and course of the rivers of this continent:

	Length in leagues of 25 to a degree.
Basin of the Great Ocean	
Colombia, or Tacoutche-Tasse,	320
San-Phelipe, (supposed course,)	300
Colorado,	260
Unknown Basin.	
Mackenzie, the Oungigah,	625
Basin of Hudson's Bay	
Shaskashawan, with the Nelson, (its mouth,)	460
Assiniboil, with the Severn,	600
Albany,	230

Basin of the Atlantic, (North America.)

		Length in leagues of 25 to a degree.
The River St Lawrence, (from Ontario,)		220
Outawa, (its tributary,)		176
Connecticut,		180

Basin of the Gulf of Mexico, (subordinate to the Atlantic.)

Mississippi, (alone,)		375
Missouri, with the Lower Mississippi,		980
Its tributaries,	River Platte,	270
	Ohio,	220
	Arkanzas,	410
	Red River,	350

Basin of the Carribbean Sea, (same.)

Magdalena,		250

Basin of the Atlantic, (South America.)

Orinoco,		480
Essequibo,		125
Amazon, or Maragnon,		1000
Its tributaries,	Ucayal, or Apo-Paro and Beni,	450
	Yotau,	250
	Iurna,	250
	Parana-Guza, or Madeira,	575
	Topayos,	310
	Xingu,	360
	Napo,	220
	Rio Negro,	325
Tocantin, or River of Gram-Para,		500
Parnaiba,		180
San-Francisco,		425
Parana, or Rio de la Plata,		710
Its tributaries,	Paraguay,	400
	Pilcomayo, a tributary of the preceding,	310
	Vermejo,	220
	Salado,	250
	Uraguay,	220
Moyale-Levou, or Colorado,		360
Cusu-Levou, or Negro,		180

Climate.] The continent of America possesses of course every variety of climate; but in this respect it differs generally from the Eastern hemisphere by a greater predominance of cold. It is calculated that the heat is at least 10 degrees less upon an average than under the same parallels in the Eastern continent. While Britain enjoys temperate seasons and mild air, Labrador, and the countries of the Esquimaux, though lying in the same parallel, are extremely cold; even the torrid zone, in America, knows none of those burning heats which are experienced in Asia and Africa. The great cause of the cold in North America has been attributed to the quantity of land stretching towards the North pole, a proportion of which is involved in perpetual winter, and the wind passing over it, it is said, brings a severity of cold along with it which nothing can resist. But Asia has an equal extent of territorial surface stretching towards the North Pole. "Its elevation alone"—as Malte Brun judiciously observes,—"explains this fact as far as regards the mountainous region; but why, it may be asked, does it extend to low tracts of country? To this an able observer (Humboldt) makes the following reply: 'The trifling breadth of this continent; its elongation towards the icy poles; the ocean, whose unbroken surface is swept by the trade winds; the currents of extremely cold water which flow from the Straits of Magellan to Peru; the numerous chains of mountains abounding in the sources of rivers, whose summits, covered with snow, rise far above the region of the clouds; the greater number of immense rivers that, after in

numerable curves, always tend even to the most distant shores; deserts, but not of sand, and consequently, less susceptible of being impregnated with heat; impenetrable forests, that spread over the plains of the equator, covered with rivers, and which, in those parts of the country that are the farthest distant from mountains and from the ocean, give rise to enormous masses of water, which are either attracted by them, or are formed during the act of vegetation. All these causes produce, in the lower parts of America, a climate which, from its coolness and humidity, is singularly contrasted with that of Africa. To these causes alone must we ascribe that abundant vegetation, so vigorous and so rich in juices, and that thick and umbrageous foliage, which constitute the characteristic features of the new continent.' Assuming this explanation," continues Malte Brun, "as sufficient for South America and Mexico, we shall add, with regard to North America, that it scarcely extends any distance into the torrid zone; but, on the contrary, as we shall see in the succeeding book, stretches, in all probability, very far into the frigid zone, and, unless the revived hope of a North-West passage be confirmed, may, perhaps, reach and surround the pole itself. Accordingly, the column of frozen air attached to this continent is no where counterbalanced by a column of equatorial air. From this results an extension of the polar climate to the very confines of the tropics; and hence winter and summer struggle for the ascendancy, and the seasons change with astonishing rapidity. From all this, however, New Albion and New California are happily exempt; for, being placed beyond the reach of the freezing winds, they enjoy a temperature analogous to their latitude." The character of excessive humidity has likewise been ascribed to the American continent; but it is universally acknowledged that, as cultivation has spread, the climate has grown sensibly milder, drier, and more salubrious.

Productions.] America produces almost all the known varieties of the animal, vegetable, and mineral kingdoms. It contains a great variety of wild animals; and, since its discovery, the various domestic animals of Europe have been introduced. The horse, the ass, the cow, the sheep, the goat, the hog, the dog, and the cat, have been carried from Europe, and domesticated in America, where, in some places, they have multiplied to an amazing degree. The following animals, and remains of animals, are common to America and Europe:

The Mammoth,	The Lynx,	The Monax or Marmotte,
Buffalo,	Beaver,	Vison,
White Bear,	Badger,	Hedgehog,
Red Deer,	Red Fox,	Martin,
Fallow Deer,	Caribou,	Water-Rat,
Wolf,	Bear,	Weasel,
Roe,	Elk, original palmated,	Flying-Squirrel,
Glutton,	Grey Fox, *Isatis*,	Shrew-Mouse.
Wild Cat,	Otter,	

The following animal species are found only in America:

The Tapir,	The Coendou	The Great Grey Squirrel,
Elk, round horned,	Sloth, Ai,	Fox Squirrel of Virginia,
Puma,	Sapajou Ouarini,	Surikate,
Jaguar,	Sapajou Coaita	Mink,
Cabiai	Tatou Encubert,	Sapajou, Sajou,
Tamanoir,	Tatou Apar,	Indian Pig, Cochan d' Inde,
Tamandua,	Tatou Cachica	Sapajou, Saimiri,
Cougar of North America,	Little Coendou,	Phalanger,
	Opossum Sarigue	

Cougar of South America,
Ocelot,
Pecari,
Jaguaret,
Alco,
Lama,
Paco,
Paca,
Serval,
Sloth, Unau,
Saricovienne,
Kincajou,
Tatou, Kabassou,
Ursen, Urchin,
Racoon, Raton,
Coati,
Vapeti,
Margay,
Crabier,
Agouti,
Sapajou Sai,
Tatou Cirquinçon,
Tatou Tatouate,
Mouffette Squash,
Mouffette Cinche,
Mouffette Conepate,
Scunk,
Mouffete, Zorilla,
Whabus, Hare, Rabbit,
Aperea,
Akouchi,
Ondatra, Musk-rat,
Pilori,
Coquallin,
Lesser Grey Squirrel,
Black Squirrel,
Red Squirrel,
Sagoin Saki,
Sagoin Pinche,
Sagoin Tamarin,
Sagoin Oustiti,
Sagoin Marakine,
Sagoin Mico,
Cayopolin,
Fourmilier,
Marmose,
Sarigne of Cayenne,
Tucan,
Red Mole,
Ground Squirrel.

The most remarkable of these animals will be described with those countries where they are principally found. We have already taken occasion to notice the fact that, in comparing animals of the same species, in the two continents, it has been found in a majority of instances, where a difference of size did exist, that the American animal was larger than that of the Eastern continent.—The birds of America are exceedingly numerous; and are said to be more beautiful in their plumage than those of Asia and Africa, but in their notes less melodious. The conder, which frequents the Andes of South America, holds, on account of its size, strength, and rapacity, the pre-eminence over all the feathered creation.—Reptiles are numerous, and many of them venomous. Insects abound, and in many parts are very offensive.—The American waters are remarkable for the abundance and variety of their fish.

America produces every kind of grain, fruit, pulse, herbs, plants, and flowers, native to Europe: besides a great variety of others, as cacao, cinnamon, pepper, sarsaparilla, banilla, balsams, mahogany, logwood, Brazil-wood, sassafras, barks, gums, resins, and medicinal herbs.

This continent, particularly South America and Mexico, abounds in gold and silver. It also produces copper, quicksilver, iron, antimony, sulphur, nitre, lead, loadstone, marbles of every sort, and various kinds of precious stones, as the diamond, emerald, and amethyst. Rock and spring-salt is of frequent occurrence throughout America.

Population.] The population of America may be divided into three classes: *Whites*, *Negroes*, and *Indians*. The Whites, who are descended from Spanish, Portuguese, British, French, Dutch, Danish, German, and Russian colonists, were estimated by Humboldt at 13,500,000; the Indians at 8,600,000; the Negroes at 6,500,000; and the mixed races at 6,500,000. The whole amount, he supposed, would exceed 35,000,000, but this number is unquestionably much below the actual truth now, and the population of the whole American continent probably does not at this moment fall short of 55,000,000, and there is yet space and fertile soil for 500,000,000. The numbers of those who speak the different languages made use of in America are thus distributed by Humboldt,—and the proportions probably still hold good:

English language, - - - -	11,647,000
Spanish, - - - - - -	10,174,000
Portuguese, - - - - -	3,740,000
Indian languages, - - - - -	7,593,000
French language, - - - -	1,242,000
Dutch, Danish, Swedish, and Russian, -	216,000

Of the Peopling of America.] It has been matter of much debate

among learned men how this continent was first furnished with inhabitants; but as this is a subject that admits not of certainty in any of its conclusions, it shall not detain us long. After enumerating the chief hypotheses which have been formed by those who have written on the topic, we will leave our reader to adopt that which to him shall appear the most probable.

The first opinion we shall mention is, that America was peopled by the Carthaginians. It is well-known that these people planted colonies on the western coasts of Africa, and the Canary islands; and it is urged as being not only possible, but highly probable, that some of their ships, employed in carrying out people and provisions for these colonies, might be driven westward by a storm, till getting into the trade-winds they found a return impossible, and, submitting to that fate which they could not resist, at length, reached land. Against this opinion it has been argued, that the Americans, when first discovered by Europeans, were unacquainted with the use of iron, with ship-building, or with the use of the plough, all which were well-known to the Carthaginians, and are arts so necessary to civilized life, that it is scarcely possible they could have been forgotten by any people to whom they were once known. Besides, the order which the aborigines of America appear to have followed, in cultivating the ordinary arts of life, was widely different from any thing known to have existed among the Carthaginians. In short, they scarcely possessed that resemblance in their civilized institutions which we are taught to look for among beings having the same common origin.

It having been established beyond a doubt, by the discoveries of Behring, and of captain Cook in his last voyage, that in about 66° N. lat., the continents of Asia and America are separated by a strait only 18 miles wide, and that the inhabitants of each continent possess many similar features, and frequently pass and repass in canoes from one continent to the other, it has been contended that America was first peopled from the N.E. parts of Asia. But since the Esquimaux are manifestly a separate species of men, distinct from all the nations of the American continent, in language, in disposition, and in habits of life, and in all these respects bearing a near resemblance to the northern Europeans, it is reasonable to suppose that they must have emigrated from the N.W. parts of Europe. Several circumstances confirm this belief. As early as the 9th century the Norwegians discovered Greenland, and planted colonies there. The communication with that country, after long interruption, was renewed in the last century, when some Lutheran and Moravian missionaries, prompted by pious zeal, ventured to settle in this frozen region, with the view of introducing among its miserable inhabitants the gladdening doctrines of the gospel. From them we learn that the N.W. coast of Greenland is separated from America only by a very narrow strait, if it be actually separated at all; and that the Esquimaux of America closely resemble the Greenlanders in their aspect, dress, mode of living, and language. By these decisive facts, not only the consanguinity of the Esquimaux and Greenlanders is established, but much support given to the theory which asserts the possibility of peopling America from the N.W. parts of Europe.

To us it appears rational to conclude on the whole, that the progenitors of all the American nations, from Cape Horn to the southern limits of Labrador, migrated from the N.E. parts of Asia; and that the nations which inhabit Labrador, Esquimaux, and the parts adjacent, from their unlikeness to the rest of the American nations, and their resemblance to the northern Europeans, came over from the N.W. parts of Europe.

Such are a few of the most rational conjectures which have been formed on this subject. The reader may, with impunity, adopt that in which he sees, or fancies he sees, the greatest probability. Of this only we are certain, that, whatever was their origin, a numerous race of men had possessed America long before it was known to the Europeans. Leaving, therefore, conjectural opinions, we proceed to a subject of more certainty, namely, an account of the manner in which the New world was discovered.

The Discovery of America.] The most important human discoveries have often originated in trivial and apparently accidental circumstances. He who discovered America was not in quest of new lands, but only purposed to explore a new way to lands already known. The maps of the age in which this great discovery was made were rudely sketched, and most inaccurate in their delineations. They place China, for example, no less than 15 hours, or 225 degrees, eastwards from the western coasts of Europe. This was an error of 85 degrees; but allowing it to have been accurate, it is evident that to proceed to China by a westward route was 135 degrees shorter, than to proceed eastwards, supposing both the voyages to be in a straight line. This was a truth sufficiently striking to a mind accustomed to reflection on such subjects, and early suggested the idea of sailing westwards to the rich countries known by the name of the East Indies, and opening a shorter passage for the trade which at that time enriched several of the commercial nations of Europe.

Norwegian Discoveries.] The earliest claim, however, to the honour of discovering the New world—as it was at first called—is that which has been advanced by Bayer, from a passage in the Chronicle of Olaus, published at Stockholm in 1697, on behalf of the Norwegians. We have already stated that Iceland was discovered by Norwegian mariners in A.D. 860. In 982, Snorro Sturlæus represents the Norwegians to have advanced as far as the coast of Greenland, when they are said to have "proceeded towards the W." and finding a more attractive coast, on which were some grape-vines, and, in the interior, several hospitable valleys, shaded with wood, they gave it the name of *Winland* or *Findland*, and settled some colonists there. The commanders of this expedition, Biorn and Lief, lived two centuries before Snorro, according to his own account; and, except from the tradition of the length of the days and nights at the place where they landed, it would be impossible to form any conjecture as to the spot. From this data, however, it would appear to be about the 58th or 59th degree of northern latitude, somewhere near the mouth of Hudson's straits, although grapes are there unknown. The latter parts of the tradition can only be solved by supposing that they actually did penetrate to some part of the eastern coast of North America.

Madoc's Voyage.] The Welsh bards and historians put in another claim to the honour of discovering America, on behalf of Madoc, one of their princes, who, they affirm, made a voyage to the shores of the New world in the 12th century. There was long a tradition in Wales of some Indians being still near the Missouri, who spoke a dialect of the Welch language; but this notion has no foundation whatever in fact. The curious reader may consult Lord Lyttleton's observations on this subject, in his history of England; and an article, by Mr Pennant, in the 58th volume of the Philosophical Transactions.

Martin Behaim.] A third claim to the honour of discovering America, of earlier date than the first voyage of Columbus, is of equally doubtful authority. Schedel, a German chronologist, of the 15th century, main-

tains that his countryman, Martin Behaim, having been entrusted with the command of a Portuguese expedition of discovery, in 1483, made those discoveries, the communication of which to his intimate friend, Columbus, first excited that navigator to enter upon his splendid career of discovery.

Columbus.] Several seamen, besides Behaim, who had been carried westerly far from their course, are said to have reported that in those remote seas they had seen an island; and it is particularly asserted by the Spanish historians, that the charts and journals of an old Andalusian pilot who died in his house, unequivocally informed Columbus of the discovery of land far to the westward.[1] Such hints, if they really were given, would, doubtless, supply his mind with additional arguments in support of his notions; but the strong hope which carried him through an undertaking, in the performance of which he found so many obstacles, seems to have been founded on his knowledge of the true figure of the earth, joined to his accurate ideas of the geography of the world, as it was then delineated. The scheme of sailing to the East Indies by a westerly course was a favourite idea with Columbus during a great part of his life; and was not likely to be adopted in an instant; a conception so vast and daring must have been gradually matured, and continually strengthened by reflection, and supported by the discovery of new facts, till, from the possession of a mere theoretical notion, he became anxious to establish it as a practical truth, and, filled with this desire, dedicated the latter part of his life to the execution of so hazardous an enterprise, as the proof demanded.

The conception of this idea, in an age of ignorance, required an accurate knowledge of the true figure of the globe, and a mind free from ordinary prejudices; and the execution of it demanded uncommon courage and perseverance. These qualities of mind were, in a very extraordinary degree, possessed by Christopher Columbus. He was born in an obscure village of Genoa; his father, and several of his ancestors, had been bred to the sea. The young Columbus received an education which, considering the times, must be reckoned good: he was taught arithmetic, navigation, astronomy, and drawing. At an early part of his life, he went to sea, and was in several engagements with the Turks and Venetians. In a voyage off the coast of Portugal, the ship in which he sailed took fire, and our young seaman with difficulty escaped ashore upon a plank, and travelled to Lisbon, where he found several of his countrymen. The Portuguese at this time were the most expert navigators in Europe; and by frequent voyages along the western coast of Africa, had added much to men's knowledge of that part of the world. The spirit of enterprise, and particularly of discovery, existed amongst them in vigour, and served to inflame that disposition which seems early to have distinguished the mind of Columbus. Enticed by the society of many of his countrymen, he was easily persuaded to remain in a nation which seemed, more than all others, to afford him opportunities of gratifying his ardent desire of visiting unknown regions. He therefore entered into the service of the Portuguese, and made several voyages both to the northward and southward, particularly along the coast of Africa.

[1] In addition to his reasoning, founded on the supposed situation of the East Indies, Columbus is said to have been informed that a Portuguese pilot, named Martin Vincent, had picked up a piece of carved wood, 450 leagues to the westward of Cape St Vincent, and which, from the continued westerly wind that had prevailed, he judged to have come from land in that quarter. A similar piece of wood, together with some thick canes, is said to have been driven by the westerly winds to Porto Sancto, one of the Madeira islands.

Columbus thought it proper to make the first offer of his services to John II. king of Portugal. His proposal was to sail to the East Indies by the western ocean, and his reasons appeared to the king to carry conviction; but while he approved of the plan, he would not accede to the terms. Making, therefore, an ungenerous use of the information he had received, he is said privately to have despatched a ship on the projected expedition, while Columbus was employed in negotiation, and indulging fruitless hopes. The commander of this secret expedition, deficient in courage or capacity, perhaps in both, returned without effecting any discovery, and spread such accounts of the affair, that Columbus soon became the object of public ridicule. Provoked by this injurious treatment, he left the court of Lisbon, and despatched his brother Bartholomew to England to make proposals in his name to Henry VII. Bartholomew was taken captive by pirates on his voyage, and not heard of by his brother for ten years, eight of which Columbus himself was destined to consume in fluctuating and most perplexing intercourse with the court of Spain, to whom he had made his overtures in person. At last, in 1492, Ferdinand and Isabella of Spain consented to equip our adventurer, after the most frugal manner, and on the 3d of August 1492, he sailed with three miserable vessels, from Palos in Spain, for the Canaries.

First Voyage of Columbus.] The following account is given in the *North American Review*, of a journal of the first voyage of Columbus, recently discovered in the archives of the Duke del Infantado, which throws considerable light on the character and adventures of the discoverer of the new world. It is throughout in the handwriting of the celebrated Bartolomé de las Casas, who possessed many papers written by Columbus, which he made use of in the composition of his unpublished *Historia de las Indias*, and who unquestionably abstracted this journal from the admiral's log-book, giving a literal copy of the most important passages. Not the slightest doubt of its authenticity can exist. Indeed Las Casas inserted an abridgment of it in his manuscript history, which served as the basis of the works of Herrera and other standard historians of the new world. The introduction to the journal exhibits, in the very words of Columbus, the views and feelings with which he set sail upon this memorable voyage. We translate it word for word, leaving the original arrangement of the sentences untouched, because it would be difficult to break them without taking serious liberties with the text.

"*In nomine D.N. Jesu Christi.*—Whereas, most Christian, most high, most excellent, and most powerful princes, our lords, king and queen of the Spains and the isles of the sea, this present year 1492, after your highnesses had ended the war against the Moors who reigned in Europe, and had finished the war in the great city of Granada, where this present year on the second day of January I saw the royal banners of your highnesses planted by force of arms on the towers of Alhambra, which is the fortress of the said city, and saw the Moorish king come out of the gates of the city and kiss the royal hands of your highnesses and of my lord the prince; and then in that same month, by the information which I had given your highnesses of the lands of India, and of a prince called *Gran Can*, which signifies in our language 'king of kings,' how he and his predecessors had often sent to Rome to solicit teachers of our holy faith to instruct him in it, and the holy father had never provided him any, and thus many people were lost by believing in idolatries, and harbouring doctrines of perdition;—your highnesses, as Catholic Christians and princes, who are lovers of the holy Christian faith and promoters of it, and enemies of the sect of Mahomet, and of all idolatries and heresies, thought to send me, Christopher Columbus, to said regions of India, to see the said princes, and the people and country, and the disposition of them and of the whole, and the course to be adopted for their conversion to our holy faith; and ordained that I should not proceed by land to the East, as it hath been customary to go, but by way of the West, in which direction we have to this day no certain evidence that any person has passed. So after having expelled all the Jews from your kingdoms and seigniories, in the same month of January, your highnesses commanded me to proceed to those regions of India with a sufficient armament; and for this granted me great favours, and ennobled me so that thence-

forth in time to come I might style myself *Don*, and should be high-admiral of the ocean, and viceroy and perpetual governor of all the islands and mainland which I should discover and acquire, and which should thereafter be discovered and acquired in the ocean, and so my oldest son should succeed me, and from degree to degree for ever; and I left the city of Granada the 12th day of the month of May of the same year 1492, on Saturday; I went to the town of Palos, a seaport, where I equipped three vessels very suitable for such a purpose; and departed from the said port, well supplied with much provisions and many seamen, the third day of the month of August of the said year on Friday, half an hour before sun-rise, and steered for the Canary islands of your highnesses, which are in the said ocean, thence to take my departure, and navigate until I should reach the Indies, and deliver the embassy of your highnesses to those princes, and thus accomplish what you had commanded me; and therefore I thought to write all this voyage very exactly from day to day, every thing which I should do, or see, or experience, as will be seen in the sequel. And beside describing every night what passes in the day, and every day how we sail in the night, I design to construct a new chart for navigation, in which I will mark the waters and lands of the ocean in their proper places under their points; and moreover to compose a book, and represent the whole by picture, in latitude from the equator, and longitude from the west; and above all it is very necessary that I forgo sleep and attempt much in navigation in order to accomplish it, which things will require great toil."—Tom. i. p. 1—3.

The first thing which strikes us in the journal is the artifice to which Columbus was continually driven, to sustain the sinking courage of his crews. Nowhere is the exalted character of this truly great man more strikingly displayed, than in the fortitude and magnanimity with which he bore up against the manifold obstacles to the prosecution of his magnificent undertaking. He had suffered the hardships of penury and oppression, with spirits unbroken, with hopes unrepressed. Animated by the conviction that undiscovered worlds lay hidden in the Western sea, and that he was the instrument ordained to discover and explore them, he had happily overcome the superstitions of the priesthood, who in the outset stigmatized his hypothesis by the odious name of heresy. The incredulity of the government had yielded to the force of truth; and its parsimony was melted by his ardour. The narrow-minded individuals, who, unable to rise themselves, hung the weight of their jealousy around his neck as usual, to hold down his lofty genius to the level of their own lowly career, he had shaken off at last in triumph. He was now floating upon the full tide of adventurous experiment. But here also the ignorance and envy of his fellows pursued him at every hour. His unalterable belief in the existence of the lands he sought, would have availed him little, had not his pre-eminent nautical skill exacted the confidence of those around him, and his intellect and courage proved equal to any emergency of fortune. For when his daring prow was pointed to the west, and his companions felt themselves on the bosom of the great deep, leaving home if not life behind, and sailing they knew not whither, it demanded a rare combination of extraordinary talents for one man, an obscure foreigner, to retain the obedience of his turbulent but faint-hearted followers. Their terrors began to be troublesome a few days after quitting Gomera, on perceiving the variation of the magnetic needle. Columbus deserves the honour of being the first to observe this phenomenon, which still remains among the unexplained mysteries of nature. The surprise and consternation of his officers and men on the occasion are sufficient proof that it was unnoticed until then. Some writers have ascribed the credit of making this observation to Cabot, in 1497; but Las Casas, Ferdinand Columbus, Herrera, and Munoz, had all concurred in claiming it for the admiral; and the following extract from the journal of his *first voyage*, dated Sept. 13, taken in connexion with a passage in his account of his *third voyage*, is considered by Senor Navarrete as establishing the fact. He succeeded in quieting the apprehensions of his people by an ingenious explanation, which, however, was unsatisfactory to his own mind. In reading the passages we are about to cite, it should be observed, that they are not taken from the ori-

ginal journal of Columbus, but from a mere abstract in the words of Las Casas; and as it appears from Munoz's unfinished *Historia del Nuovo Mundo*, that Columbus kept two journals, one private and authentic, and the other with false reckoning and specious statements, it would seem that both were used in making this abstract, the phrase, 'the admiral says,' often introducing not what he thought, but what he wished his companions to believe. Las Casas has given some long passages in the very words of Columbus, but such are accompanied by a notice to that effect, and in Senor Navarrete's book are distinguished by inverted commas.

"*Thursday Sept.* 13*th*.—This day and night, continuing their course west, they sailed 33 leagues, and counted three or four less. The currents were contrary. This day, at the commencement of night, the needles varied (*noruesteaban*) to the N.W. and they also varied somewhat to the N.W. in the morning."

"*Monday, Sept.* 17*th*.—Continued their course W., and sailed in the day and night 50 leagues and upwards; noted down but 47; the current favoured them; they saw many weeds and very frequently; it was rockweed, and came from towards the W.; they judged that land was near. The mates took the N. by marking it, and found that the needles varied to the N.W. (las agujas noruesteaban) a whole quarter, which terrified the mariners, who stood in suspense, without saying for what. The admiral perceived it, and ordered them to mark the N. anew at day-break, and they found that the needles pointed aright; the cause was that the star which appears has motion, and not the needles. At daybreak this day saw many more weeds, which appeared to be river-weeds, in which they found a live crab, which the admiral kept, and says that these are sure signs of land, because they are never found 80 leagues from shore. They found the sea water less salt since they left the Canaries, the air more and more mild; they were all in good spirits, and the vessels contended which should go fastest, to be the first to descry land; they saw many tunny fish, and the crew of the *Nina* killed one. Here the admiral says those signs were from the W., where I hope in that high God, in whose hand is all victory, that he will very soon give us land. This morning he says he saw a white bird, called Rabo de Junco, which is not wont to sleep at sea."

"*Sunday, Sept.* 30.—At night the needles varied a quarter to the N.W., and at day-break they agreed exactly with the star; by which it appears that the star has motion like the other stars, and that the needles always indicate the true point."—Tom. i. p. 8, 9, 15.

It has been generally understood that Columbus was compelled to deceive his companions in regard to the distance they sailed, and the various signs of proximity to land. The birds they saw were land-birds; the weeds were freshly disengaged from rocks; and the fish were river-fish, that never ventured far into salt water; sometimes the wind was a breeze from shore; and thus it was that every possible expedient was tried to counteract the fears and feed the credulity of ignorant mariners. We translate several passages of the journal which illustrate these remarks:

"*Sunday, Sept.* 9*th*.—Sailed that day 19 leagues, and determined to count less than was sailed, so that, if the voyage should be long, the people should not be terrified or dismayed."

"*Wednesday, Sept.* 19*th*.—Continued their course, and between day and night sailed 25 leagues, because there was a calm; wrote down 22. At 10 this day a pelican came to the ship, and another towards evening, which are not wont to fly 20 leagues from land; it drizzled without wind, which is a sure sign of land; the admiral would not stop to beat up and down to ascertain whether there was land; but he held for certain that to the north and south there were islands, as in truth there were, and he was sailing in the midst of them; because his wish was to proceed on to the Indies." [Columbus was in fact at this time only 10 leagues from some small islets or rocks, in lat. 28° or 29°.

"*Saturday, Sept.* 22*d*.—Sailed northwesterly, beating up and down; sailed 30 leagues; saw hardly any weeds. Here the Admiral says 'This head wind was very necessary for me; because my people had become highly excited, in the idea that over these seas no wind blew by which they could return to Spain.'"

"*Sunday, Sept.* 23*d*.—The weeds were in great quantities, and they found crabs in them. and as the sea was smooth and tranquil, the people murmured, saying that they had lost the deep water, and there never would be a wind for returning to Spain; but after a while the sea rose without wind, which astonished them."—Tom. 1. p. 7, 11, 12.

We pass over many entries in the journal of like import, and come to the time when the vessels actually approached their destination.

"*Wednesday, Oct.* 10*th*.—Sailed W. S. W., went 10 miles the hour, occasionally 12, and sometimes 7, and in the 24 hours 59 leagues; reckoned to the people only 44. Here the crews could endure

it no longer; they complained of the length of the voyage; but the admiral encouraged them as well as he could, giving them good hopes of the great profits they would make. And he added that it was idle for them to complain, because he was going to the Indies, and should keep on till he found them, with the help of our Lord."

"*Thursday, Oct. 11th.*—Sailed W. S. W., had much sea, more than in the whole voyage before. Saw *pardelas* and a green rush near the vessel. The crew of the Pinta saw a cane and a log, and took up a stick of wood wrought to all appearance with iron, and a piece of cane, and another plant which grows on land, and a small board. Those of the Nina also saw other signs of shore, and a branch loaded with rose-berries. By these signs all were relieved and rejoiced. Sailed this day by sunset 27 leagues."

"After sunset sailed on their first course W. Went 12 miles the hour, and at two o'clock, A.M. had sailed 90 miles, that is 22½ leagues. [Italian miles of 4 to the league.] And because the caravel Pinta was a better sailer, and kept ahead of the Admiral, she discovered land, and made the signals prescribed by him. This land was first seen by a sailor named Rodrigo de Triano; the Admiral, however, at ten in the evening standing on the quarter-deck, saw a light, although it was a thing so indistinct, that he would not affirm it was land; but he called Pero Gutierrez, a gentleman of the king's household, and told him that a light appeared, and that he should observe it, which he did, and saw it. He also mentioned it to Rodrigo Sanchez of Segovia, whom the king sent in the fleet for inspector, who could not see it on account of his standing in an unsuitable position. After the Admiral mentioned it, it was seen once or twice, and resembled a wax candle, moving up and down, which seemed to be an indication of land. But the Admiral felt certain the shore was near. Wherefore, when they had said the Salve, which all mariners are accustomed to say or chant in their way, all together, the Admiral desired and admonished them to keep a good watch from the forecastle, and look well out for the land, and that to whomever should first say he saw land, he would forthwith give a silk jacket, beside the other favours which the sovereigns had promised, which were ten thousand maravedis to the first who should see it. At 2 o'clock, A.M. the shore was in sight, 2 leagues off. They hauled all sail, and stood under the square sail alone, and lay to until Friday, when they reached one of the Lucayos islands, which the natives called Guanahani."—Tom. I. p. 18—20.

Much doubt and uncertainty have existed as to the island which Columbus first discovered. He gave it the name of *San Salvador*, and it has been generally supposed to be the island now called *St Salvador*, or *Cat island*. The position of this island not agreeing perfectly with the Admiral's course and description, Munoz conjectured that Watling's island was the true Guanahani. But Senor Navarrete adduces very strong reasons for believing it to be the largest of the Turk islands. The course of Columbus from Guanahani was continually west, from island to island, till he arrived at Nipe in Cuba. Now this fact is irreconcileable with the idea, that Guanahani is Cat island, which lies nearly due north of Nipe. Besides, the great Bahama bank, and a long chain of keys called *Cayos de la Cadena*, stretching between St Salvador and Cuba, interpose a most serious obstacle to holding such a westerly course as Columbus pursued. But by setting out from Nipe, and proceeding in a retrograde direction along his course, as he very particularly describes it in his journal, we may easily trace his path, and shall be convinced that Guanahani is no other than Turk's island. Add to this, that his description of it accords exactly with the latter, especially in the circumstance of there being a large lake in the middle of it. This point is of no great consequence, but it is satisfactory to know precisely what spot in America was first revealed to the eye of Europeans.

In the subsequent parts of the journal we frequently discover the influence of the opinions which Columbus had imbibed from the travels of Marco Polo and the famous letter of Paolo Toscanelli. It is the Indies, and the Indies alone, which he seeks. Although his reason assured him of the true figure of our globe, and he deduced the right consequences from this position, and thus was much in advance of his age, yet he had a most vague and incorrect idea of the actual locality of the Indies. After he has discovered Guanahani, his inquiries of the savages invariably point to *Cathay* or *Cipango*, or other distant Asiatic countries, at which he every moment expected to arrive. Indeed, many years afterwards, in a letter

written to the Pope in 1502, he says—"This island is Tarsis, it is Cethia, it is Ophir, and Ophaz and Cipanga, and we have called it Hispaniola." Conformable to this idea are the entries in his journal.

"*Friday, Oct. 26th.*—He set sail for Cuba, because by the signs which the Indians gave him of its magnitude, and of the gold and pearls there, he thought it must be the same with Cipango."

"*Tuesday, Oct. 30th.*—He says that he must exert himself to go to the Grand Can, who he thought was there, or at the city of Cathay, belonging to the Grand Can, which he says is very large, as he was told before he left Spain."—Tom. i. p. 40, 41.

We pass over the intermediate portions of the journal, in which the Admiral relates his discoveries among the islands, describing the appearance and productions of the country, and the condition of the inhabitants. The luxuriance of tropical vegetation, abounding in noble trees, splendid flowers, and exquisite fruits, and springing from a virgin soil of exhaustless fertility, awakens his admiration at every step. Nor is he less enchanted with the blandness and suavity of the atmosphere of the new regions he was exploring, where the people, the climate, the richness of the vegetable and mineral kingdoms, all excited his imagination, and drew from him the warmest praises. The riches planted in those beautiful islands by the hand of nature still remain; and the conquerors have increased their abundance by transporting thither and naturalizing the congenial productions of Asia and Europe. But in one other respect how changed is the whole face of things there! The native races of Guanahani, Cuba, Hayti, Jamaica, have vanished like the dew of morning; and Africa is unpeopled to supply their place. Nothing was more deeply impressed on the mind of Columbus than the perfectly amiable character of the inhabitants. He dwells upon it in the description of every island at which he touched. At peace among themselves, unarmed, and engaged in the tranquil arts of cultivation, they dreaded nothing but the ruinous descents of the brutal and ferocious Caribbees. They received the Spaniards with unsuspecting confidence, as beings of a higher order, descended among them for objects of philanthropy and beneficence. How cruelly they were disappointed in the sequel, was but too fatally proved by their speedy destruction, under the merciless rule of their foreign masters.

On the 6th of December Columbus arrived at Bohio, which, from a fancied resemblance to their native country, was, by the Spaniards, named *Hispaniola*. At this time the admiral had only two ships under his command Martin Pinzon, some time before, having deserted him. While Columbus was proceeding along the coast, one of his remaining vessels ran aground; and Columbus, reflecting that he had now only one ship remaining, thought it prudent to return homewards with the tidings of his discovery; but to prepare for a more extensive settlement, he erected a fort with the timber of the wreck, and, leaving in it a garrison of 39 men, with arms and other necessaries, sailed eastwards along the coast of the island, when he discovered his other ship, whose treacherous commander endeavoured to excuse himself for having separated from the fleet, and impute his conduct to stress of weather. On the 16th of January he left the coast of Hispaniola; and, on the 14th of February, when 150 leagues westwards from the Azores, he parted from Pinzon's ship in a storm, which threatened to destroy the vessels. While the ship's company were endeavouring, by vows and promises to the virgin, to secure their safe return, Columbus himself was using means to prevent the knowledge of his discovery perishing with himself should the worst happen. "In this perplexity," says he,—writing to their catholic majesties,—"I meditated on your highnesses' good fortune, and considered, that though I were dead, and the ship lost,

you might some way reap the fruits of this enterprise. As briefly as I could, therefore, I wrote a narrative in parchment, of what I had discovered, in how many days I performed the voyage, and what way I had done it, with the nature of those lands, of the inhabitants, and that your majesties' subjects were left in possession of what I had discovered; which writing, folded up and sealed, I addressed to your highnesses, promising a reward of a thousand ducats to him that should deliver it to you sealed, that if any foreigner found it, the promised reward might induce him not to give it to another: then I wrapt the writing in an oiled cloth, and enclosed that in a ball of wax, which I put into an empty cask, and having bunged the cask up close, threw it into the sea. Another cask with a copy of the same writing, enclosed in like manner, I placed on the highest part of the ship, so that if the ship sunk, the cask might still remain above water." This sufficiently indicates the spirit of the man. It does not appear that the cask which he threw overboard ever came to land; fortunately, however, the storm abated, and on the 15th of February they arrived at the islands of Azores, and next day cast anchor at St Mary's. On the 24th they left the Azores, and soon after encountered another storm, which forced them for shelter into the river of Lisbon. Here, contrary to the admiral's expectations, he was kindly received; and had the satisfaction of demonstrating to the Portuguese court, that he had actually performed that project which they had formerly treated as the dream of an adventurer. On the 13th of March, 1493, he arrived at Palos in Andalusia, having been absent seven months and eleven days. Pinzon had arrived in Gallicia some time before, but not meeting with the welcome which he expected from court, he retired to his native country, where he soon after died. Columbus having proceeded to Barcelona, where the court then was, was received in the most honourable manner.

Having thus detailed at some length the particulars of that voyage, which opened up America to European curiosity, avarice, and cruelty: it will not be necessary to follow Columbus so minutely in his succeeding expeditions.

Second Voyage of Columbus.] The Spanish monarch in hopes of being now amply refunded for all his expenses, forgot his former parsimony. Seventeen ships, carrying 1500 men, were quickly fitted out; with this fleet Columbus sailed from Cadiz on the 25th of September, 1493, and on the 2d of November, he arrived at one of the Caribbee islands, which he called St Dominica. He likewise touched at another, which he called Marigalante. On his passage hence to Hispaniola, he passed St Mary of Guadaloupe, St Martin, Boriquean now Porto Rico, and many other islands. On the 12th of November he arrived at Hispaniola, and found all the garrison, whom he had left in the fort which he had erected there, dead, or killed by the natives. Columbus resolved not to re-establish a colony on the same spot, but finding a convenient harbour farther to the eastward, he there founded a town, to which he gave the name of Isabella, in honour of Isabella, queen of Castile. Having sent back 12 of his ships to Spain, and quelled a mutiny which had arisen from the hopes of sudden riches entertained by his followers,—hopes which they found were not to be gratified without labour and patience,—he then proceeded into the country of Ciboa, and there erected a fortress, which he called St Thomas, where he left a garrison of 400 men. Having appointed a council of his principal officers, and given the presidency to James, his brother, he sailed with three ships towards Cuba, and discovered the island of

Jamaica, where his men were attacked by the natives, whom he represents as a warlike race. Deterred by shoals and breakers from persisting in his expedition, he returned to Hispaniola without effecting his purpose. In the meanwhile the council which he had appointed to govern in his absence, had only proved themselves unqualified for the task; the colony was in confusion, and the natives in a state of insurrection. By the assistance of a friendly chief, Columbus soon subdued the whole force of the natives, imposed a tribute upon them, sent one of the principal chiefs, or *caciques*, as a hostage to Spain, and once more saw his settlement in a respectable situation. This state of affairs did not long continue. The tribute of a horse-bell full of gold, imposed upon every individual above 14 years of age in Ciboa, and of twenty-five pounds of cotton, for every other inhabitant of the island, seemed to the natives an insupportable grievance, and provoked them to frequent insurrections. The Spaniards, too, began to feel the effects of an unhealthy climate, and were unwilling to submit to the severity of the discipline imposed upon them. Their dissatisfaction, too, was increased by the disappointment of their hopes of acquiring fortunes without trouble, and broke out in frequent mutinies. Their discontents had reached the Spanish court, and were there frequently and loudly repeated by those who envied the fame of Columbus, or coveted his fortune. The admiral, therefore, thought it necessary to return to Spain, to vindicate his character, and solicit reinforcements. He accordingly set sail from Hispaniola on the 10th of March; but through his ignorance of the nature of the trade-winds, he struggled against them three months before he arrived at Spain. Columbus waited on their Catholic majesties at Burgos, and was received with honour and apparent favour; but the little profit that had accrued from the great expenses incurred by the last expedition, was ill-calculated to satisfy a monarch at once avaricious and needy; and Columbus spent no less than two years in solicitation, before he could obtain the requisite reinforcements for a third expedition.

Third Voyage of Columbus.] At length six ships were prepared, and with them, on the 30th of May, 1498, Columbus set out on his third voyage to the new world. From the Canaries, where he had touched, he despatched three ships directly to Hispaniola, and, with the other three, he held a course different from any he had formerly sailed. In hopes of making new discoveries he now steered S.W., till, in 5° N. lat., he was deterred from proceeding farther, by the intense heat, and frequent thunder-storms; he therefore altered his course to N.W., till he was in 7° N. lat., and then sailed due W., when, on the first of August, he discovered an island, to which he gave the name of Trinidad. Soon afterwards, he discovered the continent, and landed on that part of it which is called Guiana. After about a fortnight's stay on this coast, he sailed directly for Hispaniola, where he arrived on the 30th of August, and found the colony in a very distracted state. His brother, whom he had made governor in his absence, seems not to have been well-qualified for an office so important. Francis Roldan, who enjoyed the place of chief justice, taking advantage of the admiral's long absence, had formed a numerous party, and James had, with great difficulty, preserved a small part of the island in his power. Columbus, after quelling this insurrection, began to work the gold mines. In the meantime, his enemies in Spain were daily renewing their accusations, and used various arguments to induce the king to recal him. Their artifices proved too successful, and at last Francis Bovadilla was despatched

with unlimited powers to inquire into the admiral's conduct, and, if necessary, to send him prisoner to Spain, to answer for his alledged mal-administration. Bovadilla seems very justly to have supposed, that to bestow on him power so unlimited, was, in fact, to command him to disgrace Columbus. He consequently no sooner arrived at Hispaniola, than, with very little even of the forms of justice, Columbus and his brother were put in irons, and sent prisoners to Spain. These irons he indignantly wore during the whole voyage, although the captain of the vessel in which he sailed offered to take them off: declaring that he would carry them into the presence of their Catholic majesties, and expressing his confidence that a treatment so unjust could not proceed from their orders. On presenting himself at court, their majesties apologized for the harsh usage which he had sustained, and were pleased to assure him that Bovadilla had exceeded his commission. But he was soon convinced of the insincerity of these professions, by the appointment of a Spanish governor to the island of Hispaniola; and in the heat of resentment, he vowed never again to risk his life in discoveries for such ungrateful patrons.

Columbus's Fourth Voyage.] Ferdinand, however, had sufficient political sagacity to perceive, that though Columbus was not likely to be profitable to him as a governor, yet as a discoverer he might open new regions of adventure, where men of less scrupulous minds would play that part which he wished them; and he had the art once more to prevail on Columbus to undertake a voyage of discovery, with a squadron of 4 ships, carrying 140 men each. With this squadron he sailed from Cadiz on the 9th of May, 1502: on the 20th of the same month he took in wood and water at the Canaries: sailing thence, on the 24th, he arrived at Martinico on the 15th of June, and about the end of the same month he was off St Domingo, in Hispaniola. This port he was forbidden to enter, although his ships were leaky, and a storm threatening; he put into a small creek, however, in the same island, and rode out in safety a tempest, in which Bovadilla perished, with 14 ships laden with treasure, composed partly, no doubt, of the wreck of Columbus' fortune. As soon as the storm abated, the admiral stood to the westward, and, passing by the S. side of Jamaica, he arrived at the island of Guyana in the gulf of Honduras; here he met with a canoe with an old man in it, from whom he learned, that, to the N.W. of their present situation, lay a mighty empire, governed by a powerful prince, and that to the S.E. was a strait which led to a great ocean. The empire was afterwards discovered to be that of Mexico; the strait was the isthmus of Darien; but Columbus not reflecting that, by a strait, the Indian might mean a narrow neck of land, as well as an arm of the sea, resolved to search for the latter, which he conceived must bring him to these richer parts of the Indies, which, by an opposite course, were already frequented by European merchants. The prosecution of this erroneous conjecture led the admiral into many difficulties. He sailed eastwards along the coast of Honduras, continually struggling with the trade-winds, till he came to a cape where the coast bended southward, from which circumstance he named it Cape *Gracios a Dios*, or 'Thanks to God;' continuing his course along the coast, and having landed at several places, he came at last to a fine harbour which he called *Porto Bello*, a name which it still retains. Here having been informed that in Veragua, a country to the eastward of Porto Bello, there were gold mines, he sailed backwards along his former track, encountering such storms as had nearly destroyed his whole squadron With much difficulty he arrived on the coast of Veragua, and having sent

some men ashore, they reported that gold was to be found in considerable quantities. Hereupon Columbus resolved to make an establishment in the country, and, with this design, built a fort, in which he placed 80 men, with arms and ammunition, giving the command of them to his brother. Their excesses, however, soon brought upon them the vengeance of the Indians; they were attacked in their fort, some of them killed, and the rest obliged to abandon the settlement. Having with difficulty got his men aboard, he set sail, and again arrived at Porto Bello. He then directed his course northwards till he arrived at Cuba, and, on the 24th of June, reached the island of Jamaica. His two remaining ships were now so leaky that he was obliged to run them aground, having, with much labour, kept them swimming till they reached land. It is not easy to conceive a situation more distressing than that in which Columbus now was; cast upon an island at which no European ship was likely to touch, and exposed to the continual reproaches of his crews, who laid on him the whole blame of their misfortunes, and, by their incessant mutinies, rendered his life a perpetual scene of agitation and anxiety. To relieve him from this situation, several of his friends undertook a voyage, which, even at present, would be reckoned desperate: namely, to pass from Jamaica to Hispaniola, a distance of 50 leagues, in canoes, not only unfit to weather a storm, but liable to be overset by the first squall. Providentially they arrived safely in Hispaniola, where the governor actually refused to afford him the smallest assistance. They employed above a year in fruitless importunity, during which time one-half of the admiral's people had deserted him, and committed everywhere the most savage depredations, refusing to submit, till, after a fierce engagement, they were reduced by force. At length, his friends in Hispaniola found means to purchase a vessel, independent of the governor's assistance, with which, proceeding to Jamaica, they brought away Columbus, who arrived in Hispaniola on the 13th of August, 1504. In this island he collected that part of his fortune which had escaped the avarice of his enemies, and with it returned to Spain.

At court he was received with every mark of external courtesy; but his voyage having failed in disclosing the expected road to new wealth, and Isabella, his constant patroness, being now dead, he seems in the latter part of his life, to have experienced cold neglect. He died on the 20th of May 1506. In his four voyages, Columbus discovered the Bahama islands, Cuba, Hispaniola, and Porto Rico,—many of the Carribbee islands, the island of Trinidad, and that part of the continent of South America which lies at the mouth of the Oroonoco,—a part of Mexico,—the bay of Honduras,—and the coast of the American continent stretching thence to Porto Bello: thus leaving to others very little but the merit of following his track, and of completing, by degrees, the discoveries which he had so adventurously commenced.

Amerigo Vespucci.] While Columbus was soliciting the court of Spain to fit him out for his third voyage; instead of complying with his demands, his enemies had sufficient influence with the king to cause Amerigo Vespucci, a Florentine, to be sent out to prosecute discoveries in those countries first made known by Columbus. He sailed in 1497. Touching at the Canaries, he stood westwards about 1000 leagues, and arrived at land, which must have been some of the Carribbee islands; he then continued standing westwards till he again reached land, which, from the distance and latitude, appear to have been part of Mexico. In this voyage Vespucci neither made any discovery of importance, nor established any

new settlement. In the following year he made another voyage in the service of the Spaniards. He landed in a country which he places in 5° N. lat., probably Surinam in Guiana; and having procured from the natives some gold and pearls, in exchange for toys, he returned by the Leeward islands. He was afterwards employed by the king of Portugal, in whose service he sailed from Lisbon, in May, 1501. Arriving at the continent, in 5° S. lat., he sailed along it to 47°, which was a greater extent of coast than, in that quarter of the world, had been hitherto explored by any navigator. When he returned, he published an account of this large continent; which, though perhaps not a masterly performance, was the only one hitherto offered to the world; it was eagerly read by all ranks of men, and the continent itself, instead of being named from him who first discovered it, was called America from him who discovered the greatest extent of it, and first made known to the world the nature of those countries, not improperly denominated the New world.

Vasco Nunez.] Vasco Nunez de Balboa was likewise employed in prosecuting the discovery of those regions. He conquered Cuba, and first ascertained that it was an island. On that part of the isthmus of Darien where Columbus had failed, he founded an establishment, which he called *Sancta Maria del Antigua*. Here the Indians guided him over that lofty chain of mountains which, in the middle of the isthmus, runs parallel to the shores of the Atlantic and Pacific Oceans. The hardships encountered in this journey are described as having been almost insurmountable; so that, although the distance between the two seas is not more than 80 miles, they wandered among rocks, precipices, and impenetrable forests, 25 days, before they came within sight of the Pacific ocean. The exultation of the Spaniards at this discovery was more than equal to their previous dejection. They erected a cross on the spot whence the ocean was first seen; claimed the country in form as the property of their monarch; and descended to the opposite shore, where Balboa, walking into the sea in armour, and brandishing his sword, took possession of the Pacific ocean in the name of his Catholic majesty, vowing to risk his life in defending it from all intruders. On this ocean he erected the fortress called Panama, and built a fleet to prosecute farther discoveries. As a reward for these important services, the court of Spain, to his commission of governor of Cuba, added that of the government of Panama, and the office of admiral of the South sea. But this settlement soon increasing in importance, the Spanish court, with a caprice which at that time distinguished many of their resolutions, instead of adding to the power of Balboa, sent over one Pedrarias with a superior commission, who, through motives perhaps of envy, joined to the perfidious injunctions of his employers, quarrelled with Balboa, and with a parade of justice put him to death.

John Cabot.] Henry VII. of England had at one time consented to support Columbus in the prosecution of his designs; and that navigator was only prevented from entering into the English service by his prior engagement with the court of Spain. When the fame of the discoveries made by Columbus had spread through Europe, Henry also began to consider whether he could not yet reap some advantage from a quarter to which all commercial and enterprising nations were turning their attention. As early as the year 1496, Cabot was engaged for this purpose in the service of the English king. John Cabot was a Venetian, who had settled in England. 'With his three sons he sailed from Bristol, in May, 1597, with five ships under his command. His avowed intention was, not to make

discoveries in that great country since known by the name of America, but to explore, according to Columbus's original design, a westward passage to the East Indies. It was not yet known how far the New world extended northward. Cabot therefore imagined, that by sailing westward in a high northern latitude, he might pass these newly discovered regions, and find a clear passage to the East Indies, which would still be much shorter than that which was generally used. With this design he sailed in a N.W. direction, but he was unexpectedly prevented by land from completing his intended voyage, and only acquired the fame of being the first discoverer of the North American continent. To the land at which he at first arrived, he gave the name of *Prima Vista*, or Newfoundland. Having explored the coast from 58° to 38° N. lat. without being able to discover any passage westwards, he returned home.

In the following year, 1497, he made a second voyage to America with his son Sebastian, who afterwards proceeded in the discoveries which his father had begun. On the 24th of June he discovered Bonavista, on the N.E. side of Newfoundland. Before his return he traversed the coast from Davis's Straits to Cape Florida.

In 1502, Sebastian Cabot was at Newfoundland, and, on his return carried three of the natives of that island to Henry VII.

Minor Notices.] *Fernando Cortez*, in the year 1518, made both the discovery and conquest of Mexico, or New Spain: and, in 1525, Pizarro made the discovery and conquest of Peru. These important transactions remain to be fully detailed in their proper places.

Don Diego de Almagro, about 1535, discovered Chili, and conquered some part of it. This conquest was, in 1540, farther prosecuted by *Valdivia*, who, in 1541, built there a city which he called St Jago.

Amerigo Vespucci, as already mentioned, discovered the coast of Brazil, in 1498. In 1500, a fleet destined for the East Indies, was forced upon this coast by stress of weather; the intelligence given by it, of the fertility and riches of that country, induced many private adventurers to proceed thither: these were generally destroyed by the natives, till in 1549, John III. king of Portugal, sent *Thomas de Sosa*, with a fleet carrying 1000 soldiers, and many ecclesiastics. He made a settlement in the bay of All Saints, where he built the city of St Salvador.

Gonzallo Pizarro, brother to the conqueror of Peru, in 1540, accidentally discovered the great river Amazon, and the country on its banks called Amazonia.

In 1520, *Magellan* discovered those straits, at the southern extremity of America, which still retain his name; and, having sailed through them, was the first who, by a westerly course, arrived at the East Indies.

In 1513, Florida was discovered by *John Ponce*, who sailed from Porto Rico. He arrived on the coast in spring, and was induced by the beautiful appearance of the country to give it the name of Florida. This name was for some time common to all the American continent.

Francis I. of France, in 1524, despatched *John Verrazano*, a Florentine, to make discoveries on the American coast. He traversed it from 28° to 50° N. lat.

The first native of Spain who commanded an expedition for making discoveries in America, was *Stephen Gomez*, who, in 1525, in search of a N.W. passage to the East Indies, sailed to Cuba, thence to Florida, and along the coast to 46° N. lat.

In 1534, Francis I. fitted out a second expedition, and gave the com-

mand of it to *James Cartier*. He touched at Newfoundland, discovered the gulf and river of St Lawrence, and sailed northwards to 51° N. lat., in search of a passage to China. Next year, he sailed up the river St Lawrence 300 miles; he called the country New France; built a fort in which he passed the winter, and in spring returned home.

Francis La Roche, in 1542, was sent by the French king, with 200 people, to make a settlement in Canada: they built a fort in which they staid only one winter, and returned home. A company, which, in 1550, sailed for Canada, were never afterwards heard of.

From the island of Cuba, *Ferdinand de Soto*, with 900 men, in 1539, sailed for Florida, intending its conquest. He landed at Spirito Sancto, and travelled from the sea northwards 450 leagues; he here discovered a river, on the banks of which he died. *Alvarado*, his successor, built 7 brigantines, and, in the year following, embarked upon the river, which was here a quarter of a mile broad, and 19 fathoms deep. In seventeen days he sailed 400 leagues, when he arrived at the sea into which this river discharges itself by two mouths. This appears to have been the river now called the Mississippi.

By these, and other expeditions, the eastern coast of the American continent was traced with some degree of precision, and the western coast, from the straits of Magellan to the gulf of California.—Northwards from this gulf the coast had sometimes been visited by navigators, but was very imperfectly known, till captain Cook, in 1778, explored it from 45° to 70° N. lat., having nearly completed the delineation of the western coast of this continent. To mention the particular persons by whom every minute portion of the New world was discovered and settled, would be uninteresting, and is unnecessary. The different dates and circumstances of discoveries and settlements shall be related in the histories of the countries to which they refer.

NORTH-WEST REGION

AND

INDIAN TRIBES.

The northern extremity of this vast continent will first engage our attention. "These regions, however, which may be termed *American Siberia*," says Malte Brun, "even after the recent voyages of Ross, Parry, Franklin, and Kotzebue, still continue in a great measure unknown." We are ignorant, for example, whether the waters seen by Mackenzie and Hearne, two of the latest travellers in the extreme north of America, are lakes or gulfs, or a part of the Icy seas. We do not know whether the sea, into which the Mackenzie and Coppermine rivers fall, communicates with the ocean at Repulse bay. It is not known whether the coasts seen by Baffin are really a continuous line, or belong to a chain of islands. The islands seen to the N. of Cape Severovostochnoi, in Siberia, have not yet been explored, neither has the neighbouring land of Liaikhof and Jelmer. Perhaps Greenland is actually united with America; and the coasts described by Baffin may be only an archipelago which leaves behind it a large inland sea.

North-West Passage.] Incomplete, however, as our knowledge of these bays and straits and the general outline of the western continent in this quarter is, it would have been still more imperfect, had it not been for the numerous expeditions sent out to those parts, to search for what is well known to geographers by the name of the *North-west passage.* The existence of such a passage into the Pacific ocean, was long an important question among geographers; and its discovery the favourite object among enterprising navigators. This problem has occupied the minds of speculative reasoners, and called forth the powers and skill of the ablest seamen, from the conclusion of the 15th century to our own times. And, although it now appears that the existence of such a passage is extremely doubtful, and although, if it actually does exist, it will be found utterly unfit for the purposes of commerce, yet, it may not be improper to give a short account of the results of the different expeditions which have been undertaken in search of it.

The discovery of a shorter passage to India was the first incitement to the attempts to navigate westward by the N. side of America. The trade carried on to the East Indies by European nations, at first found its way through the Mediterranean, across the isthmus of Suez, down the Red sea, and, by the straits of Babelmandel, into the Indian ocean. This was a tedious and dangerous passage, but it was the only one which, at that time, seemed practicable. The Portuguese, after many adventurous expeditions along the African coasts, at length doubled the cape of Good Hope, and opened a passage to India, which, if not much shorter, was at least more expeditious and attended with less risk. This important discovery roused the genius of navigation, and men began to think of shorten-

ing this voyage still farther, by sailing to the East Indies in a westerly direction. This idea gave rise to the famed voyages of Columbus, and the discovery of the New World; and there is reason to believe that, in the 15th century, previous to his grand expedition, Columbus had visited Iceland, and sailed to some distance within the Polar circle. Europeans had not long visited these new regions, when they were convinced, not only that they were not the Indies they were in search of, but that no passage could be found to them by a course directly to the westwards. The abundance of gold, however, found by the Spaniards, rewarded researches which were foiled in the object for which they had been originally undertaken. Other nations, perceiving the advantages gained by the Spaniards from voyages of discovery, but deterred from approaching the Spanish possessions by the pope's bull, and by the Spanish arms—both at that time very formidable—turned their thoughts towards discoveries in other quarters. The westward passage to the East Indies again recurred, and it was imagined, that, although no passage could be obtained by sailing due W., yet, by steering towards the N.W., the newly-discovered continent might be left on the S. and the passage to India might still be much shortened.

England was the first nation which endeavoured to realize this idea. Henry VII. despatched the Venetian mariner, John Cabot, and his son Sebastian, in 1497, with instructions to endeavour to sail along the newly discovered continent on its N. side, and then proceed, if possible, to the East Indies. Cabot sailed on a north-westerly course, ran a considerable distance along the coast of what is now the United States, and discovered Newfoundland, to which he gave the name of *Prima Vista*. He concluded, however, that a passage to the East Indies, in this direction, was altogether impracticable, since an extensive country was discovered to exist, with an invariable and increasing direction to the N.E, where the sea had been conjectured to be entirely open. The design of seeking a passage in this direction was for some time, therefore, laid aside.

After the Portuguese under the Cortereals, the French under Aubert, and the Spaniards, had extended their discoveries along the western coasts of America to the N. of California, reports were everywhere circulated of the pretended straits of Anian. Through this strait it was asserted, that there was a clear passage from the Atlantic to the Pacific ocean. Andrew Urdanetta, a friar, is said to have affirmed, that he had passed from the one ocean into the other through this strait. And so strongly was the world convinced of the truth of these asseverations, that the geographers of those days delineated the strait in their maps, making America a large island, bounded by the straits of Magellan on the S., and the straits of Anian, leading from the coast of Labrador to the great ocean, on the N.

Such circumstances were adequate to revive the search of a north-west passage. In the early part of the 16th century, various attempts in the same course of navigation were made by English seamen. Among them occurred the celebrated and disastrous expedition of Sir Hugh Willoughby. Martin Frobisher, an Englishman, had influence sufficient to procure the equipment of two small ships of 25 tons burden for this purpose by private adventurers. He sailed from England in June, 1576; and arriving on the American coast, he discovered, in 63° N. lat., a strait, which he sailed up, to the distance of about 60 leagues. By various disasters, however, he lost several of his men, his ships had also suffered much by stress of weather, he therefore returned home, convinced that he had discovered the strait which led into the Pacific ocean. Some pieces of ‘ a certain black ore,’

which he had brought along with him, and from which scientific men assured the world that gold might be extracted, joined to the assurance given by Frobisher that he had discovered the desired passage, soon procured a second expedition, for the purpose of prosecuting both discoveries. Frobisher sailed again in May, 1577, and entered the strait which he had discovered in his previous voyage, but he had advanced only about 30 leagues, when his squadron being dispersed by a violent storm, he resolved to return. When he came home, the gentleman whom he had carried along with him for that purpose, reported that much might be expected from the ore which had been discovered; and the hopes of a passage being still in vigour, a third expedition was fitted out, to prosecute the discoveries, and, if possible, to make a settlement in the country. This squadron, consisting of not less than 15 sail, left England in May, 1578; but had no sooner entered the straits, than a storm dispersed the greater part of the ships; Frobisher's vessel, along with several others, being driven to the southward, entered an unknown strait, and sailed in it upwards of 60 leagues, when he was obliged to return, in order to endeavour to collect his scattered fleet. Returning, therefore, northwards, he fell in with all his ships except four: but as these four, unluckily, contained the main body of the miners, and the greater part of the provisions destined for the settlement, it was resolved that the whole should instantly return home. Those who had fitted out these several expeditions considered the discovery of a north-west passage only as a secondary object; and their hopes of repaying themselves by the discovery of gold ore, had been so sadly disappointed, that they could not be enticed to equip another fleet. But soon after, Thomas Cowles, an English seaman, made affidavit, that he had heard a Portuguese mariner read, in a book written by himself, that he had sailed on an easterly course, from the East Indies along the northern parts of America, and had by that course arrived in Europe. Cowles further asserted, that the Portuguese monarch had called in, and caused to be destroyed, every copy of this book, lest the revelation of this passage should injure the trade of his kingdom and its colonies. This affidavit, whatever might be its foundation, induced several persons to apply for a patent for making the discovery, and a patent was accordingly granted to a company of adventurers for the space of five years.

The patentees employed Davis, who sailed with two ships in June, 1585. When he arrived at the place where Cabot and Frobisher had searched for the passage, and where the latter had asserted that it was certainly to be found, he is said to have discovered the fallacy of the assertion; but the maps of those regions are so different from each other, and the description of the several shores, and of the courses sailed, is so indistinct, that it is not easy to perceive on what grounds he contradicted Frobisher's assertion. Proceeding northwards, he entered the strait since called by his name; and explored the coast of Greenland, on the east side, to 64° 15′ N. lat., and the coast of the Esquimaux country on the west side, to 66° 40′ lat. On the west side of this strait, he discovered a passage not less than 60 miles broad. Into this passage—now known as Cumberland strait—he advanced 60 leagues, in a N.N.W. direction; and, having passed several islands, he observed whales coming from the westward, and encountered a strong tide from the S.W., flowing in opposition to that with which he entered. In this situation he could find no ground with a line of 300 fathoms. All these circumstances conspired to confirm him in the belief, that he was

now in the passage which had been so long vainly sought; but as the year was far advanced, and the length of the strait in which he was sailing uncertain, he returned. The hopes of having at length discovered this long desired passage, soon procured another expedition. Four ships were now fitted out; two being appointed to explore the passage to the westward, and two to ascertain whether or not Davis' strait was navigable northwards, and whether a fishery might not be advantageously carried on there. Davis sailed up the strait which he had formerly discovered, till his ships could proceed no farther, and he was convinced that this could not be the passage so anxiously desired. At the same time he discovered several other straits, and on his return home from a third voyage, he maintained that some of these had certainly a communication with the Pacific ocean.

All these passages were, at different times, explored by different adventurers; among whom were Weymouth in 1602, Knight in 1606, Hall, Hudson, and Button; and it was at last discovered, that none of them afforded the communication that was wanted; but several of these adventurers asserted, that in some parts of Hudson's bay they found a tide setting from the westwards, which they were convinced must proceed from the Pacific ocean; and this was for a long time the great argument by which the advocates for the discovery of a north-west passage enforced their opinion of its existence. The tides in almost every part of the bay were carefully examined; and—what may be reckoned singular—almost every mariner who visited these quarters brought home a different report regarding them. Indeed the officers employed in this service seem, in general, to have been very ill qualified for the task they had undertaken. The science of navigation, it is true, had not yet arrived at that perfection which it now enjoys; but these officers appear to have been defective in abilities, even for the time in which they lived. Of longitudes they knew little or nothing; and their calculations of latitude were often exceedingly erroneous. The commander of one expedition, indeed, is mentioned, who was so deplorably ignorant, that he knew nothing of the variation of the magnetic needle. From the researches of such men little satisfaction could be obtained. One place was by them often mistaken for another, and succeeding navigators could seldom ascertain to what particular spots the descriptions of their predecessors related. Henry Hudson, however, discovered those tracts and that great bay, or rather sea, which have since borne his name; and Baffin having traced the outlines of another great bay, enjoyed a similar reward. Fox traced the two great channels leading northwards out of Hudson's bay, and that channel which captain Parry has since called the Fox channel. The Hudson's bay company did little to implement that part of their bargain with the public, by which they were taken bound to exert themselves for the discovery of the straits of Anian and a western passage; and the disastrous fate of Knight and Barlow's expedition in 1719 again quenched the spirit of discovery.

In 1741 Mr Dobbs prevailed upon the Admiralty to fit out another expedition for the purpose of north-west discovery. It was entrusted to the charge of captain Middleton, who reached Repulse bay, but who on his return to England, and greatly to the dissatisfaction of Mr Dobbs and the public in general, declared that every chance of discovering a passage in this quarter, was annihilated by what he had seen. The next expedition was conducted by captains Moor and Smith, who con-

tented themselves with exploring the Wager, and ascertaining it to be a river.

It was one of the objects of Cook's last voyage, to explore the north-west coast of America, and to ascertain whether or not there appeared any probability, of the existence of a passage between the Atlantic and Pacific oceans by the northern parts of America. The result of his researches was, that there was no probability of the existence of such a passage to the southward of the 56th parallel; and that, if it really existed, it must be either through Baffin's bay, or by the north of Greenland. It was now supposed that a mass of land would be found stretching perhaps to the pole, or at least to the 80th parallel, and upon this principle all the maps were for some time constructed. Some years afterwards, however, Hearne, an agent of the Hudson's bay company, succeeded in reaching the shore of the Northern sea, and the mouth of the Copper-mine river, which he placed in about 73° N. lat.; but Mr Dalrymple, from Hearne's own data, reduced it to 69° or 70°; while Mackenzie, an agent of the North-west company, discovered the sea in nearly the same latitude, and about 20 degrees to the westward of the mouth of Hearne's river. It thus appeared nearly certain that an ocean extended along the north coast of America.

Moor, Smith, Phipps, Kotzebue, and others, distinguished themselves during the 18th century by their researches into the geography of these regions; but without making any decided approximation to the solution of the grand problem. The land-journeys of Hearne and Mackenzie to the northern extremity of America, had given a new impulse to the general curiosity, when, in 1818, two expeditions were fitted out by the English government, one for the purpose of proceeding directly northward between Greenland and Spitzbergen, the other destined to explore the passage up Davis' straits and the trending of the American coast. From neither of these equipments was any satisfactory result obtained. Another was fitted out in 1819 under lieutenant Parry, which returned in 1820, after having made more important discoveries. Sailing up Lancaster sound 500 miles, it wintered at an island, the largest of a group of islands, which in honour of his majesty they named *New Georgia;* in 74° 47′ N, lat. 110° 47′ W. long. The island was explored by hunting parties, and captain Parry himself crossed it. It is supposed to be 150 miles long, and from 30 to 40 broad. Besides wolves, which were large, the other quadrupeds found, when the summer returned, were the musk ox, the deer, the fox, and the mouse, which was found to be abundant, even through the winter, when it changed from brown to white. The fowls were, chiefly the arctic gull, the glaucus, the ptarmigan, and a singularly beautiful duck called the king-duck. The owl, in full beauty of feather, seemed to inhabit this inhospitable place throughout the year. This island cannot be more than 150 or 200 miles from the Copper-mine river, and although any point of land which was seen may be an island, yet it does not follow that there may not be land even to the pole or to Asia itself. Granting, however, that the probability is, that the whole north-coast of America is bordered by clusters of islands, among which a passage may occasionally be found, it is clear that our knowledge of this fact will be nothing more than the solving a geographical problem, as the open season is too short in these high latitudes, and the hazard too great, for the every-day purposes of commerce.

At the suggestion of Mr Scoresby, captain Parry made an attempt, in

1827, to penetrate over the frozen sea to the pole, by means of vehicles constructed so as to be used either as boats in the water, or as sledges on the ice. The accounts of Phipps and Scoresby, as well as those of other navigators, concurring in representing the ice beyond a certain point, as of a smooth, compact, and regular form, seemed to render it at least possible that a well-managed expedition of this nature might succeed, while for the same reasons they threw a damp over the expectations that were formed from those conducted by means of vessels available only in a navigable sea. On the 20th of June, after various maritime adventures, having arrived at Treunenburg bay in Spitsbergen, the polar travellers left the ship and set out on their hazardous expedition. At the latitude 81° 12′ 51″ they were first obliged to haul their boats upon the ice, and the following account of their manner of travelling, modified by circumstances afterwards mentioned, may serve for the whole journey:—"It was my intention to travel wholly at night, and to rest by day, there being, of course, constant day-light in these regions during the summer season. The advantages of this plan, which was occasionally deranged by circumstances, consisted first, in our avoiding the intense and oppressive glare from the snow during the time of the sun's greatest altitude, so as to prevent, in some degree, the painful inflammation in the eyes, called 'snow-blindness,' which is common in all snowy countries. We also thus enjoyed greater warmth during the hours of rest, and had a better chance of drying our clothes; besides which, no small advantage was derived from the snow being harder at night for travelling. The only disadvantage of this plan was, that the fogs were somewhat more frequent and more thick by night than by day, though even in this respect there was less difference than might have been supposed, the temperature during the twenty-four hours undergoing but little variation. This travelling by night and sleeping by day so completely inverted the natural order of things, that it was difficult to persuade ourselves of the reality. Even the officers and myself, who were all furnished with pocket chronometers, could not always bear in mind at what part of the twenty-four hours we had arrived; and there were several of the men who declared, and I believe truly, that they never knew night from day during the whole excursion. When we rose in the evening we commenced our day by prayers, after which we took off our fur sleeping-dresses, and put on those for travelling; the former being made of camblet, lined with racoon-skin, and the latter of strong blue box-cloth. We made a point of always putting on the same stockings and boots for travelling in, whether they had dried during the day or not; and I believe it was only in five or six instances, at the most, that they were not either still wet or hard frozen. This, indeed, was of no consequence, beyond the discomfort of first putting them on in this state, as they were sure to be thoroughly wet in a quarter of an hour after commencing our journey; while, on the other hand, it was of vital importance to keep dry things for sleeping in. Being 'rigged' for travelling, we breakfasted upon warm cocoa and biscuit, and after stowing the things in the boats and on the sledges, so as to secure them as much as possible from wet, we set off on our day's journey, and usually travelled from five to five and a half hours, then stopped an hour to dine, and again travelled four, five, or even six hours, according to circumstances. After this we halted for the night, as we called it, though it was usually early in the morning, selecting the largest surface of ice we happened to be near, for hauling the boats on, in order to avoid the danger of its breaking up by coming in contact with other masses, and also to

prevent drift as much as possible. The boats were placed close alongside each other, with their sterns to the wind, the snow or wet cleared out of them, and the sails, supported by the bamboo masts and three paddles, placed over them as awnings, an entrance being left at the bow. Every man then immediately put on dry stockings and fur boots, after which we set about the necessary repairs of boats, sledges, or clothes; and, after serving the provisions for the succeeding day, we went to supper. Most of the officers and men then smoked their pipes, which served to dry the boats and awnings very much, and usually raised the temperature of our lodgings 10° or 15°." Their food consisted of an allowance of biscuit, pemmican, and sweetened cocoa-powder, besides rum and tobacco. Their fuel consisted entirely of spirits of wine, of which two pints were the day's allowance. We extract the following from their dreary journal:— "As soon as we landed on a floe-piece, lieutenant Ross and myself generally went on a-head, while the boats were unloading and hauling up, in order to select the easiest road for them. The sledges then followed in our track, Messrs Beverly and Bird accompanying them; by which the snow was much trodden down, and the road thus improved for the boats. As soon as we arrived at the other end of the floe, or came to any difficult place, we mounted one of the highest hummocks of ice near at hand, (many of which were from 15 to 25 feet above the sea,) in order to obtain a better view around us; and nothing could well exceed the dreariness which such a view presented. The eye wearied itself in vain to find an object but ice and sky to rest upon; and even the latter was often hidden from our view by the dense and dismal fogs which so generally prevailed. For want of variety, the most trifling circumstances engaged a more than ordinary share of our attention; a passing gull, or a mass of ice of unusual form, became objects which our situation and circumstances magnified into ridiculous importance; and we have since often smiled to remember the eager interest with which we regarded many insignificant occurrences. It may well be imagined, then, how cheering it was to turn from this scene of inanimate desolation, to our two little boats in the distance, to see the moving figures of our men winding with their sledges among the hummocks, and to hear once more the sound of human voices breaking the stillness of this icy wilderness. In some cases lieutenant Ross and myself took separate routes to try the ground, which kept us almost continually floundering among deep snow and water. The sledges having then been brought up as far as we had explored, we all went back for the boats; each boat's crew, when the road was tolerable, dragging their own, and the officers labouring equally hard with the men. It was thus we proceeded for nine miles out of every ten that we travelled over ice; for it was very rarely indeed that we met with a surface sufficiently level and hard, to drag all our loads at one journey; and in a great many instances, during the first fortnight, we had to make three journeys with the boats and baggage; that is, to traverse the same road five times over." The greatest hardships they sustained during this extraordinary journey were owing to the incessant rain, of which twenty times more fell than captain Parry ever before encountered in the Polar regions. The rain was sometimes succeeded by a fog, and on one occasion they were, by this circumstance, obliged actually to grope their way yard by yard, from one bit of ice to another, and from one hole of water to another. It may be supposed, that in this dreary situation there were few circumstances, beyond those immediately referring to personal danger

or self-preservation, which arose to excite the attention of the devoted wanderers. On one occasion they heard the cry of a bird, the event of a day; and on another they saw two little flies in the snow! Having reached the latitude of 82° 45′, the nature of the ice and the weather was found to be such as to put the success of the expedition in its main object altogether out of the question, and captain Parry determined on retracing his steps. He had gained something, but not much; for Mr Scoresby, in 1806, attained to 81° 12′ 42″. Having been absent from the ship 61 days, during which they travelled, in the manner above described, 1127 statute miles, they at length arrived on board the Hecla on the 21st of August. After concluding the narrative of this abortive attempt, captain Parry remarks, "that the object is of still more difficult attainment than was before supposed, even by those persons who were the best qualified to judge of it, will, I believe, appear evident from a perusal of the foregoing pages; nor can I, after much consideration and some experience of the various difficulties which belong to it, recommend any material improvement in the plan lately adopted."

In the spring of 1829, captain Ross sailed in a steam-vessel of his own, towards the Polar regions, in the hope that, if at any period of the season an open sea reaching to the Pole should be found, he will be able to perform the voyage to and from that point, in a few days. The result of this latest attempt is not yet known; but, upon the whole, we are not sanguine of its success, nor will the reader, we are persuaded, be so after attentively considering the result of captain Parry's expedition, and the state of these icy regions as described in our general article on Physical geography.

Captain Franklin's Discoveries.] On the 21st of June, 1826, captain Franklin descended the Mackenzie river till the 2d of July, and as far as 67° 38′ N. lat. and 133° 53′ W. long. At this place, named *Parting point* by captain Franklin, the river divides into a number of widely diverging branches, separated from each other by low and partially flooded lands. It was determined that two divisions of the expedition should separate here, and that each party should follow the channel which accorded best with their respective routes. Captain Franklin, in the preceding autumn, had descended a middle channel, and reached the sea at *Garry's island,* in 69° 30′ N. lat. and 135° 45′ W. long. He now entered the most westerly arm, which winds round the base of the Rocky mountains, and reached its mouth on the 7th of July. Its outlet is so barred by sandbanks, that the crews were compelled to drag the boats for miles, even at the top of high water. In this unpleasant situation they were visited by a large party of Esquimaux, who at first behaved quietly and carried on a barter in an amicable manner, but at length afforded some trouble, and were with difficulty repelled. On the 9th of July, captain Franklin was stopped by ice, unbroken from the shore; and from that date up to the 4th of August, he could advance only as the separation took place, and seldom more than a mile or two a-day. In this tedious way he reached the 141st degree of longitude, by which time the ice had given way so as to give a passage to the boats, but other obstacles of a most serious nature now opposed themselves to his progress. The coast was so low and difficult of approach, from the shallowness of the water, that a landing on the main shore was effected only once after the passing of the 139th degree of longitude, though it was frequently attempted, by dragging the boats for miles through the mud. On all other occasions he had to land on the

naked reefs that skirt the coast, where, after the departure of ice, the party suffered severely from the want of fresh water, and once passed two entire days without that necessary article. Thick fogs and heavy gales of wind prevented the expedition from quitting this inhospitable part of the coast, and it was detained on one spot for eight days by a fog so dense, that all objects were obscured at the distance of a few yards, stormy weather prevailing all the time. Notwithstanding these almost insurmountable obstacles, the resolution and perseverance of captain Franklin and his party enabled them to reach nearly the 150th degree of longitude by the 18th of August. They had then performed more than half the distance, along the coast, to Icy Cape—had plenty of provisions—boats in good order—and an open sea before them; and although, from the fatigues they had undergone, the strength of the crews was somewhat impaired, yet their spirit was unbroken; but the period had now arrived when it was captain Franklin's duty, in pursuance of his instructions, to consider the probability of his being able to reach *Kotzebue's sound* before the severe weather set in; and if he did not expect to attain that object, he was prohibited from hazarding the safety of the party by a longer continuance on the coast. He therefore decided upon commencing his return to Bear Lake at that period, and the propriety of this determination was soon evinced by a succession of stormy weather, which speedily set in; and by intelligence he received from some friendly Esquimaux lads, that their countrymen were collecting in numbers about the mouth of the Mackenzie; and that a large part of the Mountain Indians were on the march to intercept him, on account of his having come, as they supposed, to interfere with the trade of the Esquimaux. Had he been only a few days later, it is more than probable that he could not have escaped the numerous enemies without a contest. He arrived with his party in perfect health at Bear Lake on the 21st of September. The trending of the coast carried this expedition into 70½° N. lat. With regard to the eastern detachment of the expedition, on parting from captain Franklin, they pursued the easternmost channel of the river, which is that by which Mackenzie returned from the sea, and is accurately and ably described by him. They reached the sea on the 7th of July, in 69° 29′ N. lat. 133° 24′ W. long. Considerable difficulty was now experienced in coasting a shore of a very peculiar nature, to 70° 37′ N. lat. and 126° 52′ W. long. The coast, thus far, consists of islands of alluvial origin, skirted by sandy banks running far to seaward, and intersected by creeks of brackish water, and separated in part by wide estuaries, pouring out at that season of the year large bodies of fresh water. These alluvial lands are inundated by the spring floods, and covered with drift timber, except a number of insulated mounds of frozen earth, which rise considerably above the highest water-mark, and are analagous to the frozen banks or icebergs, described as bounding Kotzebue's sound. Betwixt them and the main shore there is a very extensive lake of brackish water, which perhaps communicates with the eastern branch of the Mackenzie, and receives at least one other large river. This party subsequently tracked a rocky and bolder shore, rounded *Cape Parry*, in 70° 18′ N. lat. and 123° W. long.; *Cape Krusenstern*, in 68° 46′ N. lat.; and entered *Coronation gulf*, by the *Dolphin* and *Union straits*, which brought them nearly to the 113th degree of W. long. They then steered for the Copper-mine river, and entered it on the 8th of August. They suffered some detention on this voyage from bad weather, and had, on several occasions, to cut a passage through tongues of ice with the hatchet, and to force a way for

the boats with much labour and some hazard. The ice attains a great thickness in that sea, some of the floes being aground in nine fathoms water, but under the powerful radiation of a sun constantly above the horizon, in the summer months, it decays with an almost incredible rapidity. As the boats drew only 20 inches of water, the party were on several occasions enabled to sail through shallow canals, worn on the surface of these floes by the action of the waves, when, from the ice being closely packed on the shore, they could find no passage betwixt the masses of which it was composed. They had fortunately clear weather for these attempts. Had they experienced the fogs which captain Franklin met with to the westward, they must of necessity have remained on shore. Notwithstanding the quantity of ice they encountered thus early in the season, they were convinced that towards the end of August there is a free passage for a ship along the northern coast of America, from the 100th to the 150th degree of W. long.; and to the eastward of the Mackenzie there are some commodious harbours, although there are none on the part of the coast surveyed by captain Franklin to the westward. The whole difficulty in performing the north-west passage in a ship seems to be in attaining the coast of the continent through the intricate straits which lead from Baffin's or Hudson's bays. The flood-tide was found setting every where along the coast from the eastward. The rapids which obstructed the navigation of the Copper-mine, prevented them from bringing their boats above eight miles from the sea, and they therefore abandoned them there with the remainder of their stores, tents, &c. a present to the Esquimaux, and set out over-land to Fort Franklin, carrying (exclusive of instruments, arms, and ammunition, and a few specimens of plants and minerals) merely a blanket and ten days' provisions for each person. They arrived on the eastern arm of Bear Lake on the 18th of August, and at the fort on the 1st of Sept., after an absence of 71 days, in excellent health and condition.

The two branches of this expedition have thus surveyed the coast through upwards of 36 degrees of longitude, from nearly 114° to 150° W. long. which, together with captain Franklin's former discoveries, and those of captain Parry, render the Arctic sea pretty well known as far as the 150th degree of W. long. There remain only 11 degrees of unknown coast betwixt that and Icy Cape, and only 200 miles of the whole coast remains to be explored from the western point of captain Beechy's tract to the most eastern point reached by Franklin.

The Aleutian Islands.] The Aleutian islands are a chain extending from the S.W. point of the peninsula of Alaska, between the parallels of 51° 40′ and 55° N. lat., and dividing the sea of Behring,—as it is sometimes called,—from the great Northern ocean. These islands are divided into three groups: the *Aleutians*, properly so called,—the *Andreanof islands*, —and the *Lisii*, or *Fox islands*, sometimes also called *Kawalang*. Malte Brun says, "they constitute one single and unique chain; and might be compared to the piles of an immense bridge which has formerly been thrown across from continent to continent." They describe between Kamtschatka in Asia, and the promontory of Alaska in America, an arc of a circle which almost joins the two lands together. They belong to Russia; and were partly discovered by Behring in 1741, partly by Tchirikof in 1742, and explored in the latest instance by Billings and Saritchef in 1793 and 1795. They are in general mountainous and rocky, and rise to a considerable elevation towards their centre. Their coasts are of dangerous navigation. The mountains are porphyritic and schistose; and in some

instances of a volcanic nature. A species of jasper, in general of a yellow tint, is very common. The soil is in many places fertile, and the islands nearest to America produce pines, larches, and oaks. The only quadrupeds are foxes and mice; sea-birds and fish are very numerous and varied. The population has been recently estimated at 5,600; and it is affirmed that it was much more considerable in former times, but that the cupidity of the Russian American company, which has establishments on the islands of Kadiak and Ounalashka, has tended to keep down their numbers, by compelling the more robust and active portion of the population to become their fox-hunters and fishers. The Aleutians are of a moderate stature, and brown complexion; their face is round, nose small, and eye black. The custom of inserting a piece of carved bone, or glass-beads, into their lower lips and nostrils, is common amongst them. Their religion is a species of Shamanism; and their language appears to have some analogy to that of the Kurilians.

General Description of Russian America.] That part of the American continent, comprehended under the name of Russian America, is generally of a very alpine and sterile character. The celebrated mountain of *St Elias*, which is probably a volcanic peak, is calculated to have an elevation of 2,775 toises; and La Perouse estimated the range of mountains which terminates at Crosc sound to be upwards of 10,000 feet in elevation. The primitive mountains of granite, or slate, in some places rise immediately from the sea, and have their summits constantly covered with snow. Malte Brun thus vividly describes the general appearance of this region:—“Above a range of hills covered with pines and birch, rise naked mountains, crowned with enormous masses of ice, which often detach themselves, and roll down with a dreadful noise into the valleys below, which they entirely fill up, or into the rivers and bays, where, remaining without melting, they rise in banks of crystal. When such a mass falls, the crashing forests are torn up by the roots, and scattered to a distance, the echoes resound along the shores with the noise of thunder, the sea rises up in foam, ships experience a violent concussion, and the affrighted navigator witnesses, almost in the middle of the sea, a renewal of those terrific scenes which sometimes spread such devastation in alpine regions. Between the foot of these mountains and the sea there extends a stripe of low land, the soil of which is almost every where a black and marshy earth. This ground is only calculated for producing coarse though numerous mosses, very short grass, *vaccinias,* and some other little plants. Some of these marshes, hanging on the side of the hills, retain the water like a sponge, while their verdure makes them appear like solid ground; but, in attempting to pass them, the traveller sinks up to the mid-leg. Nevertheless, the pine-tree acquires a great size upon these gloomy rocks. Next to the fir, the most common species is that of the alder. In many places nothing is to be seen but dwarf trees and shrubs. Upon no coast with which we are acquainted, have there been remarked such rapid encroachments of the sea upon the land. The trunks of trees that had been cut down by European navigators, have been found, and recognized, after a lapse of 10 years. These trunks are found sunk in the water, with the earth which supported them.” The inhabitants of the districts towards the N. seem to be Esquimaux. Mackenzie describes some of the native tribes as of a low stature, with round faces, high cheek-bones, and black eyes and hair. Nearer the Pacific, they are distinguished by grey eyes.

Continuation of North-West Region.] The countries extending from

the frontiers of Russian America, as far as the confines of California, appear to form a succession of plateaus, or elevated terraces, which are bounded on the E. and W. by two chains of mountains. That towards the E. is denominated the *Rocky mountains*. The other runs parallel to the coast, at the distance of about 100 leagues from the shore of the Pacific, from Cook's inlet to New Albion, a distance of more than 1000 leagues. Malte Brun regards the peninsula of California as the extremity of this great chain. The same geographer thinks that in the idioms, manners, and belief, of the Indian tribes scattered over this region, some similitude to those of the Aztecs or Mexicans may be traced.

CHAP. II.—INDIAN TRIBES.

A FEW general remarks may here be made on the manners and customs of the North American Indians, reserving particular observations for those places where they may appear necessary.

About three-fourths of North America are still in possession of the aboriginal tribes. If we begin on the coast of the Pacific ocean, in lat. 30° N., and draw a line along that parallel till it strikes the meridian of 94° W., and then due N. along that meridian to the parallel of 47° N., and thence due E. along that parallel to the Atlantic ocean,—nearly all the continent S. and E. of this line is in the possession of the whites; while the Indians possess nearly all to the N. and W. of this line. That is to say, the Indians still own all the northern part of what has been termed Spanish America, the western part of the United States, and nearly the whole of British America. From the eastern division of the United States they are fast disappearing. Dr Morse states, as the result of his inquiries, that there were, in 1822, only 8,387 Indians in New England, New York, and Pennsylvania; 120,283 in the country E. of the Mississippi; and about 470,000 altogether in the whole territory of the United States. Within the British American dominions, it has been estimated, that the Indians number 9,500 warriors, or 34,550 souls. In New Mexico and New California, where the population is only in the proportion of 7 inhabitants to a square league; and in the mountainous territory of Mapimi, occupied by the Appaches, the Indians may amount to between 60,000 and 70,000 souls. Their total numbers, therefore, may be roughly estimated at rather more than half a million, or less than 600,000 souls. To the W. of the Mississippi, the population of the United States is only 8 persons to the square league. Of the western tribes, the most numerous are the Osages and Pawnees.

Persons and Dress.] All the Indian tribes have a remarkable similarity in external appearance. They are "in general," says Malte Brun, "of a large size, of a robust frame, a well proportioned figure, and free from defects of organization. Their complexion is of a bronze, or reddish copper hue—rusty-coloured as it were, and not unlike cinnamon or tannin. Their hair is black, long, coarse, and shining, but not thickly set on the head. Their beard is thin, and grows in tufts. Their forehead is low, and their eyes are lengthened out, with the outer angles turned up towards the temples; the eye-brows are high, the cheek-bones prominent, the nose a little flattened, but well marked, the lips extended, and the teeth closely set and pointed. In their mouth, there is an expression of sweetness

which forms a striking contrast with the gloomy, harsh, and even stern character of their countenance. Their head is of a square shape, and their face is broad, without being flat, and tapers towards the chin. Their features, viewed in profile, are prominent, and deeply sculptured. They have a high chest, massy thighs, and arched legs, their foot is large, and their whole body squat and thick set. Anatomy likewise enables us to ascertain that in the cranium, the superciliary arches are more strongly marked; the orbits of the eye deeper; the cheek-bones more rounded, and better defined; the temporal bones more level; the branches of the lower jaw less diverging; the occipital bone not so convex; and the facial line more inclined than among the Mongol race, with whom it has been sometimes attempted to confound them. The shape of the forehead and of the vertex most frequently depends on the employment of artificial means; but, independently of the custom of disfiguring the heads of infants, there is no other people in the world in whom the frontal bone is so much flattened above; generally speaking, the skull is light." "In no race of mankind," says Dr Scouler, "is more anxiety displayed to impose some artificial deformity on their bodies, than among the aborigines of the American continent and islands. There may be seen within the circuit of a few hundred miles almost every variety of artificial deformity that a wild imagination could suggest. The custom of tatooing is not uncommon. The septum of the nose is so perforated as to admit of shells and feathers. At Queen Charlotte's island the women make a large incision into the lower lip, so as to contain an oval piece of wood, two inches in length, and from six to eight lines in breadth; but the most interesting process in respect to natural history is the compression of the children's heads. The existence of this practice has long been known, and the effects produced by it on the form of the cranium have been noticed by various anatomists; yet the following observations will not prove unacceptable, furnished as they are by one whose repeated and personal inquiries, during a residence among the Indians, have rendered the subject familiar to him. All the tribes on the North-west coast, whether insular or continental, from the banks of the Columbia river to the northern extremity of Quadra and Vancouver's island, flatten the heads of their children. These tribes have a great similarity in their habits, language, and appearance; and their method of flattening the head is extremely simple, and does not appear to be attended with any disagreeable circumstances to the health of the child. As soon as the infant is born, the head is frequently and gently compressed with the hand, and this is continued for three or four days. The child is then placed in a box or cradle, which is rendered comfortable by spreading moss, or a kind of tow, made from the bark of the cypress, over it. The occiput of the child rests on a board at the upper end of the box, and is supported by tow or moss; another board is then brought over the forehead, and tied firmly down on the head of the infant. The child is seldom taken from the cradle; and the compression is continued till it is able to walk. A child about three years old presents a most hideous appearance. The compression, operating chiefly on the forehead and occiput, reverses the natural proportion of the head, and causes it to assume the form of a wedge. The eye-balls project very much, and the individual ever after has the eyes directed upwards. Nature, however, alarmed at such an attempt to deface her works, attempts to repair the injury; hence the skulls of adults are less flat than when they were infants, although still sufficiently deformed. From the pressure being applied to the forehead and occiput,

the two parietal bones bulge out very much; and, from the inequality of the pressure, the symmetry of the head is destroyed. The capacity of skull, however, is little altered; and the distortion does not seem to have any effect on their intellectual powers."—All the various tribes have a close resemblance in their dress, which consists entirely of furs and hides; one piece being fastened round the waist, and reaching to the middle of the thigh, and another larger piece thrown over the shoulders. Their legs are protected by skins fitted to the shape of the leg, and ornamented with porcupine quills; their shoes or sandals are made of the skin of the deer, elk, or buffalo, dressed with the hair on, and made to fasten about the ankles. The women have their bodies covered from the knees upwards. Their shifts cover the body, but not the arms, and their under-garments reach from the waist to the knees. Their shoes and stockings are not different from those of the men. Those men who wish to appear very gay, pluck all the hair from their heads, leaving only a round spot of about two inches diameter on the crown of the head, on which are fastened plumes of feathers, with quills of ivory or silver. The peculiar ornaments of this part, are the distinguishing marks of the different nations. They sometimes paint their faces black, but oftener red; they bore their noses and slit their ears; and in both they wear various ornaments. The higher ranks of women dress their hair with silver ornaments in a peculiar manner; and sometimes paint it. They have generally a large spot of paint near the ear, on each side of the head; and, not unfrequently, a small spot on the brow.

Habitations.] Their tents or huts are composed of poles meeting in a point at the top: these are covered sometimes with skins, sometimes with bark, and sometimes with mats made of rushes. They are without windows, and have for chimnies a small opening left at the top. The same skins which by day serve them for seats, supply them with beds by night, when they are spread on the ground, round the fire which is in the centre of the apartment. As their habitations are thus rude, their domestic utensils are few in number, and plain in their formation. They have pots of black stone or clay, in which they boil their meat; and bowls made of the knotty parts of a tree; their spoons are made of a wood resembling boxwood, and they roast their meat on wooden spits.

Marriage.] None of the North American tribes, however rude, are unacquainted with the institution of marriage. They generally are contented with one wife; sometimes they take two, but seldom more than three. The women are under the direction of their fathers in the choice of husbands, and very seldom express a predilection for any particular person. Their courtship is short and simple. The lover makes a present, generally of game, to the head of the family to which the woman he fancies belongs. Her guardian's approbation obtained, he next makes a present to the woman; and her acceptance of this signifies her consent. The contract is immediately made, and the match concluded. All this is transacted without ceremony, without even a feast. The husband generally carries his wife among his own relations, where he either returns to the tent which he formerly inhabited, or constructs a new one for their own use. They sometimes, but seldom, remain among the wife's relations. These contracts are binding no longer than during the will of both parties. If they do not agree, the woman returns to her relations, and, if they have any children, she takes them along with her; but after they have children, a separation very seldom takes place. If a woman be guilty of adultery,

and her husband be unwilling to divorce her, he cuts off her hair, which is considered the highest disgrace which can be put upon a female. The husband employs himself only in the chase. On the woman is devolved every domestic charge. She erects the tent, procures fuel, manages the agricultural affairs, dresses the provisions, catches fish, and makes traps for small animals.

Diseases and Burials.] An Indian is free from those distempers which are generated by luxury or sloth; but is subject to others, frequently not less fatal. The excessive fatigue he often undergoes, and his severe fasts followed by voracious intemperance, are often productive of consumptive and pleuritic complaints. Their chief remedy and preventive, in all kinds of distempers, is sweating. They construct a stove for this purpose. It is a small tent, closely covered, into which the patient enters; water is then thrown on heated stones placed on the floor, which soon produces violent perspiration. The invalid then plunges himself into cold water, and a cure is often effected by such rude means. In fevers, they make use of decoctions and lotions of herbs. Their physicians are well-skilled in the cure of wounds, fractures, and bruises. They have much knowledge of the medicinal virtues of herbs, and often apply them with great effect; but to magnify themselves and their skill in the esteem of their tribe, they accompany all their applications with ceremonies and incantations. An Indian is never afraid of dying; he hears the physician pronounce his disease mortal with indifference. If he has a family, he gives them his advice for their conduct after his death, and regulates all things for the approaching event with composure. When dead, he is placed in a sitting posture, dressed in his usual habits, with his arms beside him. His relations sit round him, and address themselves to him, as if he still heard them. Their orations on that occasion are commonly panegyrical. Some of the nations are said to have no particular burying-place; others have one common to several tribes. Along with their dead, they inter all their weapons used either in hunting or war, with their clothes, paints, and domestic utensils, from a persuasion that they may be of use to them in another life, where their enjoyments and occupations are supposed not to be different in kind from those in which they have here been employed.

Hunting.] Hunting is the chief employment of every male Indian; and in it they display much dexterity, and no less sagacity. Their hunting-parties are fixed in a general assembly of the chiefs of their tribes. For these expeditions they prepare themselves by severe fasts, during which they endeavour to discover, by their dreams, in what direction they are most likely to meet with plenty of game. A dexterous and resolute hunter is held nearly in as great estimation as the most distinguished warrior. Scarcely any device which the ingenuity of man has discovered for ensnaring or destroying those animals that supply them with food, or whose skins are valuable to Europeans, is unknown to them. When they hunt the bear, they endeavour to discover his winter-retreat; the whole troop then surrounds it in a circle, and proceeding equally towards the centre, seldom fail to despatch their prey. A herd of buffaloes is surrounded in a similar manner; they drive them inwards by setting fire to the grass, and of the number thus surrounded few are ever permitted to escape. The elk is traced in the snow, which retards his usual speed. Sometimes they conceal themselves behind a tree, and shoot their game as it chances to pass; at other times one party embark in canoes, while another, forming a semicircle, drive the enclosed game towards the lake

or river, where they are soon destroyed. This employment is far from being free from danger. The elk, the buffalo, and the moose, when wounded, are not only furious but of great strength; they turn with impetuosity on the hunters, and if not speedily despatched, or dextrously avoided, destroy their assailants. Among the northern tribes, hunting the beaver is a favourite employment. Sometimes these animals are caught in traps placed in the paths which they make into the woods; sometimes a hole is made in the ice on their dams, to which the beaver comes for fresh air, and where he is soon despatched by those who watch for that purpose; sometimes the hunters destroy the beavers' houses, and drive them into a net previously placed for them in the deepest part of their dam. Whatever is caught in hunting is divided with the greatest impartiality: and none are ever heard to murmur or insinuate that their share is less than their merits.

Religion.] The religion of the Indians is simple; they have few articles of belief, and fewer ceremonies. They believe that there are beings superior to themselves, who manage, by their power and wisdom, the affairs of this world; that these beings are all subjected to one Great Spirit, who is superior to every existing creature; and that this Great Spirit is of infinite power, and of a benevolent disposition. Their misfortunes, therefore, they imagine to proceed, not from him, but from an inferior spirit to whom they ascribe a disposition purely malevolent. They sometimes are prompted by gratitude to perform an act of devotion to the Great Spirit; but they much more frequently adore the malevolent being, that he may remove the evils by which they are oppressed, or avert those by which they are threatened. They believe in a future state, in which they are to enjoy, in a more complete manner, those pleasures which they pursued in this life, with the advantages of a mild climate and a fertile soil abounding with game, whose flesh never cloys the appetite, nor surfeits by excess. They have priests, or men who are accounted proper persons, either to conciliate the favour of their deities, or to avert their wrath. But, as the American Indians seldom engage in solemn religious ceremonies, the priests cannot, from this source, secure their maintenance. To the office of the priesthood, they have therefore annexed those of prophet and physician; and the offices of priest, physician, and prophet or conjurer, are for the most part hereditary. They seldom make any formal offering to the Great Spirit; but to the malevolent spirit an offering is sometimes made. When attacked by any general calamity, such as scarcity or sickness, they take a victim, generally a dog, and having tied his mouth, without killing him, they singe him at a fire, and then affix him to a pole, with a bundle of beaver-skins, after which the priest addresses the spirit, deprecates his wrath, and implores a mitigation of their troubles.

Government.] The Indians are divided into nations, and subdivided into tribes. Both the nations and the tribes have particular symbols by which they distinguish themselves. These symbols are generally animals, such as the tiger, the snake, the wolf, the buffalo. In the same manner individuals are distinguished. Every Indian accounts himself as entirely independent, and accountable to no one for his actions. Their submission is wholly voluntary; their chiefs may persuade, but have no power to enforce obedience. At ordinary times, therefore, they live in a state of the greatest equality. In times of difficulty, however, when any plan is to be formed that requires sagacity, those naturally possessed of superior abilities, or who have acquired wisdom through length of days, naturally claim the

superiority. The civil and military departments are, for the most part, managed by different persons. The former is under the direction of a chief, whose office is hereditary, assisted by the elders of the tribe; the latter is managed by a warrior chief, who is the bravest of the tribe, and one who has oftenest successfully attacked his enemies. The elders, along with the hereditary chief, determine when they are to make war. To the warrior chief is committed the sole direction of it. The former of these chiefs is called their king; the latter, for the most part, is termed their captain; but when the hereditary chief or king is a man of known courage, he is often made chief warrior, and unites both these dignities in his own person. The objects of Indian government are generally the foreign concerns of the tribe, war, peace, treaties, and alliances; it seldom or never intermeddles with domestic concerns, farther than to regulate a general hunting-party. Within his own family each man follows his own inclinations. Even public resolutions are never delivered in the form of commands; they proceed no farther than advice, yet are not on that account the less effectual. Private wrongs are retaliated by those who have suffered them; murder is avenged by the nearest relations of the murdered person. The elders, or *sachems*, are chosen not only for their age, but their abilities in speaking. Each family generally appoints one. These debate on all public concerns; seated in a circle, each, in his turn, speaks his opinion, in concise and nervous language; and without their general concurrence, nothing of importance is ever undertaken.

War.] The youth of these various tribes are much addicted to war. Accustomed to hear the exploits of their forefathers related with admiration, they become impatient to signalize themselves in the same career. The usual avowed causes of war, among the Indians, are to secure their right of passing through certain tracts of country; to assert their right of hunting within certain bounds; to maintain their claims to their own territories; or to avenge the death of such of their tribe as may have fallen in former conflicts. Every tribe has a band of warriors. Their arms were bows and arrows, and a war-club; but, since their intercourse with Europeans, they have substituted the musket for their bows and arrows, and the tomahawk for their war-club; and to these have added a scalping-knife and a dagger. When the Indians set out on their march, a mat is all they take besides their arms. They maintain themselves on their way by hunting. If not near the enemies' country they move quite unguarded, separating into small parties during the day, for the convenience of hunting; but taking care at night, to return to their camp, which is always pitched before sunset. By the sun, and their knowledge of the country, they direct their different routes so well, that they never fail of meeting at the appointed place. When they have entered the enemy's country, they conduct their march with the greatest secrecy; the game is no longer pursued; fires are not lighted; they are not even permitted to speak, but converse only by signs. The sagacity which they evince under such circumstances can· scarcely be conceived by civilized nations. At a very great distance they will discover habitations by the smell of the fire; they will perceive the track of a foot on the smoothest grass, and on the hardest substance; and from this track they can discover, with amazing certainty, the nation, the sex, the stature of the person who has passed, and the time that has elapsed since the track was formed. It is not easy to avoid an enemy so sagacious, and it becomes the great concern of both parties, therefore, to conceal their own traces, and discover those of their

opponents. To effect this they use all precautions: they follow each other in a single line, each treading in the footsteps of those before him, while the last carefully conceals their track by strowing leaves upon it, and if they discover a rivulet in their way, they march in it, the more effectually to deceive their enemies: they march only during the night, during the day they form a continual ambuscade. When they succeed in discovering their enemies, they immediately hold a council, in which they plan the dreadful scene which is soon to be acted. Immediately before day-break, at the moment when their adversaries are supposed to be immersed in their soundest sleep, they approach on their hands and knees, till within bow-shot; the chief then gives a signal, whereat they start up with a horrid yell and discharge their arrows, and taking advantage of the confusion, rush forwards, and, with their tomahawks, complete the carnage. Without some evident advantage of this kind, an Indian seldom engages: for he expects no praise for a victory, which is purchased with the lives of any of his own party. Having secured the victory, and despatched all who would be troublesome to them on their return, they make the rest prisoners. They then scalp the dead and wounded; twisting the hair round their left hand, and setting their foot in the person's neck, with a few strokes of the scalping-knife, they dexterously separate the scalp from the head, and preserve it as a monument of their victory. When they approach their own tents, they announce their arrival by different cries: the, number of war-whoops indicates how many prisoners they have taken,—the number of death-cries, how many of their companions they have lost. A council is immediately held, at which the fate of each prisoner is soon determined. A prisoner is no sooner condemned than he is led to execution. While they are binding him to the stake, he sings his death-song, and expires with ferocious courage. If he be a chief, who has given proofs of his prowess in former engagements with his enemies, they frequently put his fortitude to a severe trial, by the infliction of the most dreadful torments; but the victim usually glories in his sufferings, as unequivocal marks of the opinion entertained of him by his tormentors. He boasts of the victories he has obtained over their nation; he enumerates the scalps which he possessed; he recapitulates the manner in which he has treated his prisoners, and reproaches them with ignorance in the art of torture. This scene, it is said, sometimes continues, with little intermission, for several days; till the prisoner, exhausted, but not humbled, expires without a sigh; or till his taunts provoke his tormentors to frustrate their own designs, by putting a speedy end to his existence. Burning is the general way of putting their prisoners to death, but few of them suffer even in this manner. A great part are delivered to the chief of the nation, and being distributed to those who have lost their husbands, sons, or other relations, in the war, they are by them generally adopted into their respective families, and, if they conduct themselves properly, experience all that tenderness and regard which belonged to those whose places they fill. They have no inducement to return to their own tribe; for the Indians esteem all who permit themselves to be made prisoners, as being unworthy of life, and would not receive them, could they make their escape. The prisoners who are not adopted into some family, are made slaves, and are often disposed of to the Europeans for spirituous liquors.

The animosity of savages is hereditary, and can seldom be extinguished; when peace becomes necessary, therefore, it is not easy to bring about the

proposal of preliminaries. On such occasions a few of the most respectable heads of the tribe, attended by those chiefs who have undertaken to be mediators, proceed to the nation with which they are to treat. Before them is carried the pipe of peace,—a sacred symbol, the rights of which no Indian will presume to violate. This pipe is about four feet long; its bowl is of red marble, and its stem of wood, adorned with the feathers of birds, and painted with hieroglyphics. From the variety of these ornaments, an Indian can immediately judge to what nation it belongs. Having reached the encampment of the hostile nation, an inferior chief fills the pipe of peace with tobacco; and having lighted it, presents it, first to heaven, then to earth, and, lastly, in a circle, to all parts of the horizon; thereby invoking the spirits that dwell in heaven, in earth, and air, to be present at the treaty. He next presents it to the hereditary chief, who takes a few whiffs; blowing the smoke, first towards heaven, and then around him towards the earth. In turn, it is presented to all the chiefs in their gradations, none presuming to touch it but with his lips. A council is immediately held; and, if the parties agree, a red hatchet is buried as a symbol of the promised oblivion of their animosity.

Amusements.] Their meetings for business are always concluded with a feast. Dancing is likewise a favourite amusement. The women dance more gracefully than the men, but never mix in the same dance. They carry themselves erect, their arms close by their sides, moving a few yards, alternately to the right and left. This movement is performed on their heels and toes, without any steps like the Europeans. They move with a great deal of agility, and keep time with the greatest accuracy. They have several principal dances: such as the pipe-dance, the war-dance, and the marriage-dance, all differing in their movements. The chief of these is the pipe-dance: it is pleasing to a spectator, and is used by the ambassadors negotiating a peace. The war-dance is used when they set out to make war, and when they return: and is intended to express all the particulars of an Indian campaign. In this dance, each performer brandishes his weapon, whirling it about with a variety of threatening gestures, and the whole is accompanied with the war-whoop, so that to a stranger it is a terrifying spectacle. Another of their amusements is gaming, to which they are much addicted. They have one game in which the different parties endeavour to drive a ball made of deer-skin, to two opposite goals, with a kind of racket, with which they keep the ball from reaching the ground. Another game, of which they are very fond, has some resemblance to dice. The Indians engage in these sports with much keenness; at the former they are often hurt; at the latter they will sometimes stake all they possess, and sometimes even their personal liberty.

Language, &c.] "In North America," says Malte Brun, "the language of the *Aztequas* extends from the lake Nicaragua to the 37th degree, along an extent of 400 leagues. It is less sonorous, but fully as rich as that of the Incas. The sound *tl*, which in the *Aztequa* is only added to nouns, is met with in the idiom of Nootka as the termination of verbs. In the idiom of Cora, the principal forms of the verb are similar to the Aztequa conjugations, and the words present some affinities. After the Mexican, or Aztequa language, that of the *Otomites* is the one that is most generally spoken in New Spain. But, besides these two principal languages, there are, between the isthmus of Darien, and the 23d degree of latitude, a score of others, to fourteen of which we are already in possession of very complete grammars

and dictionaries. The greater number of these languages, far from being mere dialects of one only, are at least as different the one from the others as the Greek is from the German, or the French from the Polish. It is only between the Aztequa idiom and that of Yucatan, that some resemblance is discovered. New Mexico, California, and the N.W. coast, form a region which is still but little known; and it is precisely from these that Mexican tradition derives the origin of many nations. The languages of this region would constitute a very interesting subject of research; yet we scarcely possess more than a vague idea of them. There is a great conformity of language between the *Osages*, the *Kanses*, the *Otos*, the *Missouris*, and the *Mohawks*. The guttural pronunciation of the fierce *Sioux* is common with the *Panis*. The language of the *Appaches* and the *Panis* extends from Louisiana to the sea of California. The *Eslenes*, and the *Runselen*, in California, likewise speak a widely extended idiom. The *Tancards*, on the banks of the Red river, are remarkable for a peculiar clucking sound; and their language is so poor, that they express one-half of their ideas by signs. In the southern provinces of the United States, as far as the Mississippi, there is an immediate affinity between the idioms of the *Choktaws* and of the *Chickasaws*, which have likewise some appearance of being connected with that of the *Cherokees*. The *Creeks* or *Muskohgees*, and the *Katahbas*, have borrowed words from them. Farther to the N., the once powerful tribe of the Six Nations speaks one single language, which, amongst others, forms the dialects of the *Seneccas, Mohawks, Onondagoes, Cayugas, Tuscaroras, Cochnewagoes, Wyandotes*, and *Oneidas*. The numerous *Nadowassians* have a separate idiom. The dialects of the *Chippaway* language are common to the *Penobscots*, the *Mahicannis*, the *Minsis*, the *Narragansets*, *Natixes*, *Algonquins*, and *Knistenaux*. The *Miamis*, with whom Charlevoix classes the *Illinois*, also borrow from them some words and forms. Lastly, on the confines of the Knistenaux, in the most remote part of the north, the *Esquimaux* are met with. whose idiom extends from Greenland to Oonalaska. Even the language of the Aleutian islands appears to possess an intimate resemblance with the dialects of the Esquimaux, in like manner as these do to the Samoid and Ostiac. In the midst of this belt of polar nations—resembling each other in language as well as in complexion and form—we find the inhabitants of the coasts of America, at Behring's straits, constituting, with the Tchouktches in Asia, an isolated family, which is distinguished by a particular idiom and a more imposing figure, and, in all probability, originating from the new continent. This great number of idioms proves that a considerable portion of the American tribes have long existed in that savage solitude in which they are still plunged." Of all these, the Chippaway language is the most prevailing, and is spoken in most of the general councils and negotiations of the tribes. It is said to be easily pronounced, and to be the most copious of all the Indian languages. These tribes have no letters; they make use of hieroglyphics to convey their meaning to others. Cutting the bark from a tree, they represent on it the figures of those transactions of which they wish to convey information. They reckon their time by nights; their months are lunar. Distances are computed by days' journeys,—a day's journey being supposed to be nearly 20 miles; and they divide it into quarters. From their great knowledge of the face of the country, they frequently make draughts or maps of it, which are found to be very cor-

fect. They can count to any number, but have no idea of arithmetic; their enumeration is in the decimal progression.

CHAP. III.—GREENLAND.

Situation and Boundaries.] Greenland, which has been generally reckoned part of America, in its general outline and position, resembles the vast promontory of South America. It reaches, as far as the land is discovered, from Cape Farewell, a small island divided from the shore by a narrow inlet, in 59° 30′, to 80° N. lat. Its eastern coast stretches in a N.E. direction towards and beyond Spitzbergen, and is bounded by the Atlantic ocean. Its western coast runs N.W., and is bounded by Davis' straits and Baffin's bay. Its northern coast has never been explored. Its eastern coast, usually denominated East Greenland, was by the Norwegians and Icelanders called *Osterbygd*, or 'the Eastern settlement;' and its western coast, or West Greenland, *Westerbygd*, or 'the Western settlement.' The former, being earliest discovered, is called *Old Greenland;* the latter *New Greenland.* Under the general name of Greenland, the whale-fishers include the islands of Spitzbergen, so called from the sharp-pointed mountains with which they abound. By them also the whole W. coast of this country is called *Davis' straits.* The Danes divide the W. coast into North and South Greenland; the former reaching from 59° 30′ to 68° N. lat., the latter from 68° to 78°.

Historical Notice.] Greenland was first discovered to Europeans, in the 8th or 9th century, by Ericke Raude, an Icelander, who was driven by accident upon the coast. On his return he represented the country so favourably to his countrymen that several families followed him thither, where they soon became a thriving colony, and bestowed upon their new habitation the name of *Groënland,* that is, 'green land,' on account of its verdant appearance. This colony was converted to Christianity by a missionary from Norway, sent thither by the celebrated Olaf, the first Norwegian monarch who embraced Christianity. Under his protection, the settlement continued greatly to increase; and in a little time the country contained 12 parishes, 190 villages, a bishop's see, and 2 convents, under the jurisdiction of the archbishop of Drontheim. A regular intercourse was maintained between this settlement and Norway till the year 1408. In that year the 17th bishop was sent to take possession of his see, but the coast of East Greenland was found to be surrounded by such vast quantities of ice as to be wholly inaccessible, and from this period all communication has been cut off with those unfortunate colonists.

A colony had also been settled in West Greenland, probably in the latitude of 60°, which maintained a constant intercourse with Europe, and soon increased to 4 parishes containing 100 villages. But this colony, from about the year 1376, appears to have been totally neglected by the mother country; and, being engaged in continual hostility with the Esquimaux, the native inhabitants, are supposed to have been entirely extirpated by their barbarous enemies, and by the ravages of that dreadful pestilence termed the black death.

In the year 1380, Greenland was visited by Antonio and Nicolo Zeno, two Italian nobleman who drew the first map of that country; it was also successively visited by Martin Frobisher in 1576 and 1578; by John Davis in 1585; and by William Baffin in 1616. In 1621, Hans Egede, a Norwegian clergyman, prompted by a laudable zeal for the promotion of

Christianity, resigned the benefice which he held in Norway, and sailed for Greenland, with the view of endeavouring to diffuse true religion among the natives. It was not without great difficulty and danger that he at length arrived off a place called Baal's river, on the W. side of Greenland, in lat. 64. Here M. Egede, and 43 men who remained with him, immediately set about building a house, in which they were most cordially assisted by the natives. He then applied himself to learning the language, and by his liberality and sweetness of manners greatly endeared himself to the inhabitants. This new colony was from year to year carefully supplied by the mother-country; but, as it brought no profit, a royal edict was published, in 1731, enjoining all the king's subjects in Greenland to return home. M. Egede, however, zealous for the salvation of the inhabitants, staid behind, with his family and a few others, who chose to follow his fortunes. In 1733, the Greenland trade was resumed with great vigour; and a gratuity or pension of 2,000 rix dollars a-year granted to the mission.

Face of the Country.] Malte Brun affirms that this country is "nothing more than a mass of rocks intermingled with immense blocks of ice." From its northern limits, as far as has yet been discovered, to its southern extremity, Greenland exhibits a range of inaccessible rocky mountains, separated by narrow valleys which are never visited by the sun. The higher regions are covered with enormous masses of ice, which being undermined by rapid torrents, are frequently precipitated into the valleys. Some of the mountains, in the 62d degree of latitude, rise to the height of 3,000 feet above the level of the sea, and, excepting in a few hollow places, are free from snow during the summer. There are innumerable gulfs on the western side. Rivers are few in number and small in magnitude, owing, no doubt, to the perpetual prevalence of frost; *Baal's River* is the largest. The springs and rivulets which flow from the mountains are frequently dried up in summer; they are most abundant in the spring, when, from the melting of the snow, they overflow their banks, and impart a considerable degree of fertility to the shores of the friths. In the valleys large lakes are often formed from the melting of the ice and snow upon the mountains. Spring-wells have been discovered; and one exhibits the singular phenomenon of rising and falling with the tide, although it is 36 feet above the level of the sea; while another, a warm spring, is remarkable for having at all times a temperature equal to 104° of Fahrenheit.

The coast is everywhere bold and rocky like that of Norway; and the navigation of the shores, particularly the eastern, is at all times more or less impeded by ice: which is of two kinds, fresh and salt water ice. Fresh water ice appears in icebergs or masses of enormous magnitude and surprising shapes, sometimes rising to the height of 500 feet above water; while the salt water forms what are called fields of ice, which often seem to be of interminable extent. The ice formed by the fresh water is clear, hard, and brittle, having an appearance entirely glassy, and displaying sometimes a variety of the most brilliant colours. The icebergs form an immense rampart, stretching along the western coast of Greenland into Davis's straits. Nothing can present a more dazzling appearance, when they are illuminated by the sun, and glowing with the reflection of his ray. When, on the other hand, the wind begins to blow, and the sea to rise in vast billows, the violence with which they dash against each other fills the spectator with astonishment and terror. The driving ice is always

accompanied by thick fogs, which renders it still more dangerous to navigators.

Climate.] The climate of Greenland, owing to its northern position, and the winds which blow over its icy surface, is extremely cold; in winter, while the N.E. wind blows, the thermometer is often at 48° below zero. Before the ice begins to be formed, the sea smokes, and produces a fog, called *frost smoke*, which has the singular effect of blistering the skin. The aurora borealis sometimes appears here in great splendour, and fills the whole horizon with the finest tints of the rainbow, while the crackling sound, like that of electric sparks, by which it is usually attended, is distinctly heard. Mock suns are very frequent. From the peculiar state of the atmosphere in clear weather, the islands off the continent seem to the spectator to approach nearer him, and to increase in size; sometimes they assume the form of groups different from the real shape, and appear suspended in the air. Lightning is sometimes observed, but thunder is very rare. The rains are generally of short duration, the air is pure, and in some places the heat in summer exceeds 80°.

Productions.] During the short spring and summer—which seldom exceeds four months—vegetation is rapid in this country; and the plants, except being of a more dwarfish character—the tallest trees being only 18 feet high—are nearly the same as those of the northern districts of Britain. There is some land that admits of cultivation, and probably barley might be made to grow.

Animals.] Among marine animals, the whale tribe is here conspicuous. The great whale, or Greenland whale, *balæna mysticetus*, is said sometimes to exceed 60 feet in length; but of 322 individuals, in the capture of which Mr Scoresby was concerned, none occurred of a length exceeding 58 feet. The fin-fish, *balæna physalis*, is an annual visitant of the shores, and is often taken by the natives: he is considerably longer than the mysticetus, and is a more powerful and swifter animal, moving at the rate of 12 miles an hour. An individual of this species, found dead in Davis's straits, measured 105 feet in length. . Besides these, three other species, the *balæna rostrata*, or the beaked whale,—the *balæna musculus*, and *balæna boops*, are also inhabitants of the same seas. The porpoise, the sword-fish, and the *narwal*, or sea-unicorn, frequently appear on the coast. Various species of seal inhabit the surrounding seas, and are of immense importance to the Greenlanders in supplying them with food and clothing, as well as with various articles useful in their simple arts and domestic economy. The walrus or *morse*, the *trichecus rosmarus* of zoologists, is a native of the same seas. Different species of cod-fish are common, and species of the salmon tribe are not rare; the *salmo arcticus* approaches the coast in immense shoals about the commencement of summer, and is then taken in great numbers. It is dried in the sun, and eaten during the winter as a substitute for bread. We cannot resist the opportunity here afforded us of quoting the following excellent and interesting remarks on animal life in the Polar regions, from the 1st volume of the *Edinburgh Cabinet Library:* "When we contemplate," say the learned editors of that work, "the aspect of the northern world,—bleak, naked, dreary, beaten by the raging tempest, and subject to an extremity of cold which, with us, is fatal to life and to all by which life is supported,—we naturally imagine that animal nature must exist there on a small scale, and under diminutive forms. It might be expected, that only a few dwarf and stunted species would be scattered along its melancholy shores, and that life, as it

attempted to penetrate these realms of desolation, would grow faint and expire. But the mighty Architect of nature, whose ways and power far surpass human comprehension, makes here a full display of his inexhaustible resources. He has filled these naked rocks and wintry seas with a swarming profusion of life, such as he scarcely brings forth under the most genial glow of tropical suns. He has stored them with the mightiest of living beings, compared to whose enormous bulk, the elephant and hippopotamus, which rear their immense shapes amid the marshy plains of the tropics, seem almost diminutive. Even the smaller species, as that of the herring, issue forth from the frozen depths of the Arctic zone in shoals which astonish by their immensity. Moving in close and countless columns, they fill all the southern seas, and minister food to nations. The air too is darkened by innumerable flocks of sea-fowl, while, even upon the frozen surface of the land, animals of peculiar structure find food suited to their wants. By what means, or by what resources, does nature support, amid the frozen world, this immensity of life? Wonderful as are her operations, they are always arranged agreeably to the general laws imposed upon the universe; and we shall find, in the structure and condition of the animal world, the powers by which it is enabled to defy this frightful rigour of the elements. Some of the provisions by which animal frames are adapted to the varying extremes of the climate have almost the appearance of direct interposition; yet a more profound investigation always discovers the causes of them to be deeply lodged in their physical organization. It is on the seas and shores of the Arctic zone that we chiefly observe this boundless profusion of life; and in conformity with that arrangement by which nature supports the inhabitants of the seas, by making them the food of each other, so here also we observe a continued gradation of animals, rising one above another, the higher preying upon the lower, till food is at last found for those of largest bulk and most devouring appetite. The basis of subsistence for the numerous tribes of the Arctic world is found in the genus *medusa*, which the sailors graphically describe as sea-blubber. The medusa is a soft, elastic, gelatinous substance, specimens of which may be seen lying on our own shores, exhibiting no signs of life except that of shrinking when touched. Beyond the Arctic circle it increases in an extraordinary degree, and is eagerly devoured by the finny tribes of all shapes and sizes. By far the most numerous, however, of the medusan races are of dimensions too small to be discerned without the aid of the microscope,—the application of which instrument shows them to be the cause of a peculiar colour, which tinges a great extent of the Greenland sea. This colour is olive-green, and the water is dark and opaque compared to that which bears the common cerulean hue. These olive waters occupy about a fourth of the Greenland sea, or above twenty thousand square miles; and hence the number of medusan animalcules which they contain is far beyond calculation. Mr Scoresby estimates that two square miles contain 23,888,000,000,000,000; and as this number is beyond the range of human words and conceptions, he illustrates it by observing, that 80,000 persons would have been employed since the creation in counting it. This green sea may be considered as the Polar pasture-ground, where whales are always seen in the greatest numbers. These prodigious animals cannot derive any direct subsistence from such small invisible particles; but these form the food of other minute creatures, which then support others, till at length animals are produced

of such size as to afford a morsel for their mighty devourers. The genus *cancer*, larger in size than the medusa, appears to rank second in number and importance. It presents itself under the various species of the crab, and, above all, of the shrimp, whose multitudes rival those of the medusa, and which in all quarters feed and are fed upon. So carnivorous are the propensities of the northern shrimps, that joints hung out by captain Parry's crew from the sides of the ship were in a few nights picked to the very bone; and nothing could be placed within their reach except bodies of which it was desired to obtained the skeleton. Many of the zoophytical and molluscous orders, particularly *actinia*, *sepia*, and several species of marine worms, are also employed in devouring and in affording food to various other animals." Birds common to northern latitudes, particularly petrels, gulls, and other sea fowl, are numerous. Here are also found ravens, eagles of a large size, falcons, and other birds of prey; and likewise a linnet, which warbles very melodiously. The only quadrupeds of Greenland are—the dog, which is here of a large size, rising to the height of the Newfoundland, but broad like the mastiff, and is employed in drawing the sledge, the blue fox, the arctic fox, the reindeer, and the Polar, or white bear, which is exceedingly fierce and mischievous. Black cattle and sheep, of which they have a considerable number, have been introduced by the missionaries. These they support through the winter upon grass cut and made into hay during the summer.

Geology.] The prevailing rocks on the coast of Greenland belong to the primitive class, and consist chiefly of granite, gniess, micaceous and argilaceous schistus, and porphyry. Limestone is rare; basaltic rocks, containing zeolite and other kindred minerals, are distributed in extensive ranges; and coal of an inferior kind, and in small quantity, alternates with beds of sandstone in Disko island. The rare mineral cryolite has hitherto been only found in Greenland, which also furnishes very fine garnets.

Inhabitants, &c.] The Greenlanders of both sexes are generally rather below what is considered throughout Europe the common size, but they are well-proportioned, fat, and plump. Their faces are somewhat flat, their hair black and lank, and their complexion, from their sordid manner of living, of a brownish red. Their language is the same with that spoken about Labrador and Hudson's bay, the inhabitants of which they very much resemble in their mode of living. They have a very high opinion of their own attainments, and take great pleasure in ridiculing Europeans, to whom they commonly affix a nickname. They are apt to learn, and can easily be taught to read and write their own language, while many of them can speak Danish with propriety. Their patient endurance of hunger is surprising, and their bodily strength, considering their diminutive size, quite astonishing. They are a kind and social people; they never pay a visit without making a present of some trifle, and every one who is in want of food and shelter finds refuge and support in the house of his neighbour.

Their usual dress—which is nearly the same for both sexes—is a sort of close frock, under which they wear, during winter, a shirt made of fowlskin with the feathers attached; to the frock is appended a hood, resembling a monk's cowl, which they draw over the head in bad weather; some of them wear the round hats of Europeans. These frocks, along with their boots and stockings, are usually made of seal and rein-deer-skin,

and sometimes very ingeniously from the entrails of whales, dolphins, or seals.

In winter, the Greenlanders live in houses, and during the summer in tents made of the smooth skins of the dog-fish. At the close of the summer, every family sets about building a new house or repairing the old one. Their houses, however, are nothing more than huts of a square form, and usually from 12 to 18 feet in length, seldom rising more than 6 feet above the ground. They are built with rough stones, having the interstices closed up with moss or peat-earth, and roofed over with turf. The entrance is dug under ground, narrow and winding, and so low that they can only be entered by creeping, and they have commonly one or two windows made of the entrails of the whale. The task of erecting them, as well as all manner of domestic drudgery, generally falls upon the women. In the interior of the houses there are no divisions; a bench running from end to end serves for a seat, a table, and a bed. The floor is sunk considerably below ground; and a hollow stone, filled with blubber and moss, which serves for a lamp and a grate, is kept continually burning; this renders them so warm that the inmates are usually stripped to the waist; and the air is besides rendered so impure by the evaporation of the people, the effluvia of dead fowls and seals, the entrails of animals, the putrid offals of boiled and raw flesh, together with the drippings of smoke and train-oil with which every thing is covered, that a European finds it impossible to continue within doors for any length of time.

In cooking and eating their victuals they are most loathsome. They have no set time for meals, but usually prepare their game as soon as it is brought in. When they eat, they sit upon the ground around a large wooden dish, out of which they take the meat with their fingers; the men partaking first, and afterwards the women, who sit at the opposite side of the house. They prefer the blood of the dog-fish to any other beverage; but their usual drink is water, and they can drink a great deal of brandy without being intoxicated.

During their long day, the men are almost constantly employed in hunting and fishing, in order to provide for their equally long and dreary night; and the weapons they make use of are all excellently adapted for the purpose. These are the harpoon for killing whales, and a larger, and a smaller lance, which are generally used in killing seals. In killing sea-birds the fowling pike is employed, while for land-game fire-arms are now substituted for the Indian bow and arrow formerly in use. The natives of the southern coasts confine themselves to hunting the seal, which is to them what the bread-fruit tree is to the Otaheitan. Their canoes are constructed of thin pieces of wood joined with thongs, and covered on the outside with seal-skin; which formation renders them so pliable and elastic, that the roughest sea seldom injures them. In a flat-bottomed canoe called *umiak*, which is about 24 feet or 30 feet long, their families are conveyed from one place to another; in the smaller canoe, called *rajak*, the men procure sea game. Only one man goes out in this canoe, which is about 12 feet long, and 1½ wide, and has a hole in the middle of the upper surface, with a hoop of bone or wood, in which the rower sits, fastening the loose part of his frock around it, so that no water can enter; thus equipped, the navigator, or rather man-fish, will row 60 or 70 miles in a day, though he has but one oar, six or seven feet in length, and flat at both ends. This canoe is very easily overset, but the Greenlander has an amazing dexterity in recovering his boat again when such an accident

happens. They also make use of sledges drawn over the ice by 6 and sometimes 12 dogs; and so rapid is this conveyance, that they are said to be frequently carried over a space of 100 miles in nine or ten honrs by a full team.

In their marriages the Greenlanders seem to be guided entirely by the dictates of nature. The parents are said never to interfere: the bridegroom pays no regard to dowry, and the only thing that can recommend the bride is good housewifery, to which all the females are assiduously trained from their tenderest years. The rules of gallantry require that the bride be taken by force from her father's house, and carried by the bridegroom to his own, and this forms the marriage ceremony. Polygamy is sometimes, though rarely, practised by such as have not embraced Christianity. The wife is sometimes put away by her husband, and if she is dissatisfied she usually elopes, and returns to her parents.

The heathen natives of Greenland haveno worship or religious ceremonies, but believe in the existence of a Supreme Being, and besides this Being, they have an idea of certain subordinate spirits, each of whom has its separate locality. The *Angelkut* are the philosophers and physicians of the Greenlanders, and are thought to be the only persons admitted to the Divine Being. These men impose on the superstitious, by pretending to cure diseases by magic, and to preserve health by certain charms. The dead, dressed in their finest clothes, and covered with seal-skin, are buried on an eminence; the grave is built of stone above ground, the body placed in a sitting posture, and the canoe, weapons, and utensils of the deceased, are laid by the side of the grave.—The language of the Greenlanders, which has little variety of dialect, abounds with gutturals and double consonants. The letters *r*, *h*, and *t*, predominate in it. Participles are usually substituted for adjectives; augmentatives and diminutives are very numerous, and each verb has its negative attached to it, and every flexible word its dual. Their numerals are only five; and numbers above five are expressed by addition, as five and one, five and two, &c. The Greenlanders of the north speak a dialect almost unintelligible to those of the south. The women employ words and inflexions which none but themselves are permitted to use.

Commerce.] The trade to Greenland has always been a monopoly. At first it was conducted by a company of merchants, but it is now carried on by the Danish government. Each settlement is managed by a trader and his assistant, who are paid by the government. The exports from Greenland are feathers and eider-down, horns of the sea-unicorn, skins of seals, foxes, bears, hares, and rein-deers, whalebone, and oil of all kinds. The imports from Copenhagen are guns and ammunition, all sorts of ironmongery, various sorts of cloth-manufactures, looking-glasses, snuff-boxes, &c. Five or six vessels, whose cargoes have been estimated at £13,000 sterling, go out from Copenhagen to Greenland every year, about the beginning of May. The productions carried back are supposed to average £17,000 sterling.

Whale-Fishery.] The whale-fisheries are chiefly carried on by the settlers, and for the Danish government. The British whale-fishers visit Disko yearly, about the end of April, and leave it in June. The *balæna mysticetus*, or great Greenland whale, only is caught at this season. The smaller species of whale, *balæna boops*, which regularly visits the coast about the end of July, is then caught by the native Greenlanders. We are indebted for the following details to the Edinburgh Cabinet Library:

"The whale-fishery, for one ship and one season, is a complete lottery, the result of which, according to the skill and good fortune of the persons employed, fluctuates between a large profit and a severe loss. Sometimes a vessel is so unlucky as to return *clean;* another brings only one fish; while eight or nine, producing about ninety tuns of oil, are considered necessary to make an average voyage. There are fortunate instances of a much larger produce. The greatest cargo ever known by Scoresby to have been brought from the northern seas was that of captain Souter, of the Resolution of Peterhead, in 1814. It consisted of forty-four whales, yielding 299 tons of oil, which, even at the reduced rate of *L.*32, sold for *L.*9,568, raised by the whalebone and bounty to about *L.*11,000. In 1813, both the elder and younger Mr Scoresby brought cargoes less in quantity, less in quantity, indeed, but which, from the oil selling at *L.*60 per tun, yielded a still greater return. The former, in the course of twenty-eight voyages, killed 498 whales, whence were extracted 4,246 tuns of oil, the value of which and of the whalebone exceeded *L.*150,000; all drawn by him out of the depths of the northern ocean.

"The British fishery has lately yielded a produce and value much exceeding that of the Dutch during the period of its greatest prosperity. In the five years, ending with 1818, there were imported into England and Scotland 68,940 tuns of oil, and 3,420 tons of whalebone; which, valuing the oil at *L.*36 10*s.*, and the bone at *L.*90, with *L.*10,000 in skins, raised the entire produce to *L.*2,834,110 sterling, or *L.*566,822 per annum. The fishery of 1814, a year peculiarly fortunate, produced 1,437 whales from Greenland, yielding 12,132 tuns of oil, which, even at the lower rate of *L.*32, including the whalebone and bounty, and added to the produce from Davis's Strait, formed altogether a value of above *L.*700,000.

"The following has been furnished to us from an authentic source as the result of the fishery of the year 1829, distinguishing the ports:—

Ports.	No. of Ships.	Tonnage.	Fish	Oil.	Bone.	
				Tuns.	Tons.	Cwt.
Aberdeen . .	11	3322	84	1171	63	14
Berwick . .	1	309	11	147	8	16
Dundee . .	9	3031	77	1005	54	9
Hull . .	33	10,899	339	3982	235	19
Kirkaldy . .	4	1261	51	649	37	0
Leith . .	7	2393	71	862	48	4
London . .	2	714	2	32	2	3
Montrose .	4	1301	39	481	27	11
Newcastle . .	3	1103	45	541	29	10
Peterhead .	12	3429	118	1445	78	16
Whitby . .	3	1050	34	357	21	8
Totals .	89	28,812	871	10,672	607	10

ESTIMATED VALUE.

10,672 tuns of oil at £25 . .	£266,800
607½ tons whalebone at £180 .	109,350
	£376,150

"In the Commercial Tables presented to the House of Commons in 1830, the entire proceeds of last year are stated at *L.*428,591 6*s.* 6*d.*; but this, of course, includes also the southern fishery. Of this amount there were exported to foreign countries, *oil* to the value of *L.*73,749 10*s.* 6*d.*,

and *whalebone* amounting to *L*.40,666 15*s*. 6*d*.; making in all, *L*.114,416, 6*s*. It may be mentioned, that this trade is now carried on entirely without legislative encouragement, the bounty having ceased to be granted since the year 1824."[1]

Settlements.] The Danish establishments consist of about 20 factories scattered along the coasts. The principal settlements for the fisheries on the western coast of Greenland are: *Holsteinburg*, in 67° 10′; *Egedesminde* and *Wester island*, on the south of Disko bay; *Hunde island* and *Crown Prince island* in Disko bay; *Christianshaab*, *Claushavn*, and *Jacobshavn*, on the continent of Disko bay; *Godhavn* on Disko island, and *Klokkerhuck* on Arve Prince island. Besides those for the fishing trade, several missionary settlements have been established in different districts of the country by the Moravian brethren, who have long persevered with unceasing assiduity in their pious labours in that dreary and inhospitable region. In 1802, including the Moravian settlements and the natives, mostly converted to Christianity, the total population of the west coast of Greenland was supposed to amount to 20,000 souls. It is only the coast, for an extent of 300 leagues, that is inhabited; neither the Danes nor the Greenlanders have yet crossed the chain of mountains which cuts off their access to the interior.

ADJACENT ISLANDS.] Greenland is surrounded by many thousands of islands, which are mostly barren rocks interspersed with valleys covered with perpetual ice. They are visited by the Greenlanders, during the spring, for the purpose of catching seals. In 61° 21′, an uninhabited island, of considerable magnitude, called by some navigators, from its terrific appearance, the *Cape of Desolation*, is always surrounded to a great extent with masses of floating ice.—*Disko*, the largest island on the coast, measures a degree from north to south.—All the islands from 71° northwards are small, and are generally denominated *Women's islands*.—*Spitzbergen* was long considered as united to, and forming a part of Old Greenland; but is now ascertained to be a cluster of islands, scattered between 76° and 80° N. lat., and 9° and 21° E. long. The principal, or mainland of these islands, is 300 miles in length, and presents to the eye numberless peaks, ridges, and precipices, rising from 3,000 to 4,500 feet above the sea level. According to some, it was discovered by Sir Hugh Willoughby, in 1553; according to others, by the Dutch navigator Barentz, in 1596. The Russians claim this dreary country, and maintain a colony from Archangel. Its general appearance in all respects resembles Greenland; the whale-fishery is carried on along the coasts; in open seasons, when the ships find a channel from 20 to 50 leagues wide, through which they proceed along the shores of Spitzbergen till they reach the latitude of 78° or 79°, where the whales are most abundant.

[1] "The Dutch have published tables, exhibiting the results of their fishery for the space of 107 years, between 1669 and 1778, both inclusive. During that period they sent to Greenland 14,167 ships, of which 561, or about four in the hundred, were lost. They took 57,590 whales, yielding 3,105,596 quardeelen of oil, and 93,179,860 pounds of bone, which yielded a value of L.18,631,292. The expense of fitting out the ships amounted to L 11,879,619. Value of ships lost, L.170,422. Expense of preparing the oil, bone, &c. L.2,567,109. Total expenses L.14,917,150; leaving a profit of L.3,714,142. The Davis's strait fishery, between 1719 and 1778, employed 3,161 vessels, of which 62 were lost. The produce was L.4,288,235, which, deducting L 3,410.987 of expenses, left a profit of L.877 248. The Greenland fishery would thus have yielded a profit of about 25 per cent., and at Davis's strait about 26 per cent.; but it may be observed, that the Dutch in their estimate of expenses have not included the original cost of the vessels. In the subsequent years, from 1785 down to 1794, the number of ships was reduced to sixty, and the trade is said to have been carried on with absolute loss."—*Edinburgh Cabinet Library*.

BRITISH AMERICA.

THAT part of North America claimed by Great Britain is of very great and undefined extent. It lies between 42° 30′ and 70° N. lat., and between 55° and 105° W. long.; and is bounded on the N. by the limits of the Hudson's Bay charter; on the E. by the Atlantic ocean and Davis's straits; on the S. by the Atlantic and the United States; and reaches westwards to an extent that has never been properly ascertained. Its divisions are as follows:—

1. New Britain, including New North and South Wales and Labrador.
2. Canada in general, comprehending Upper and Lower Canada.
3. Nova Scotia, including New Brunswick, and the islands of Newfoundland, Cape Breton, and St John's.

In the map attached to the report on emigration, the following table appears of the population of the British North American possessions:

	1806.	1825.
Lower Canada,	200,000	430,679
Upper Canada,	70,718	157,541
New Brunswick,	35,000	72,932
Nova Scotia,	65,000	104,000
Cape Breton,	2,513	16,000
Prince Edward's Island,	9,676	28,657
Newfoundland,	26,505	63,644
	409,412	873,453
Imports from these Colonies into Britain,	L.385,812	L.1,312,911
Exports to do. from Britain,	976,058	2,246,223

CHAP. I.—NEW BRITAIN.

Boundaries and Extent.] This country, which is annexed to the government of Lower Canada, extends from Canada, in the 50th degree of northern latitude, to the northern limits of the Hudson's Bay charter, in the 70th degree; and from 55° to 105° W. long.; being about 1,350 miles in length, and nearly as much in utmost breadth. On the S. it is bounded by the gulf of St Lawrence and Canada; and on the E. by the Atlantic ocean; but the lands on the northern and western boundaries are entirely unknown. It contains the districts called *New North Wales, New South Wales*, and *Labrador.*

Lakes, Rivers, and Straits.] New Britain contains several lakes; one called *Winipeg*, or 'muddy water,' is not much inferior in size to Lake Huron. In the late maps it is laid down between 51° and 54° N. lat., and between 96° and 99° W. long. Its banks are shaded by the sugar-maple and poplar, and it is surrounded with fertile plains, which produce the rice

of Canada. Mackenzie states that there is a boat-communication between that lake and Lake Nepewer.—The *Lake of the Woods* is formed by the *River de la Pluie*, which, after a course of 80 miles, empties its waters into this reservoir, which are again discharged at its northern extremity by the *Winipeg*.—A ridge called the *Portage la Loche*, 13 miles in breadth, divides the waters that discharge themselves into Hudson's bay, from those which flow into the Northern ocean. "The Portage la Loche," says Mackenzie, "is of a level surface, in some parts abounding with stone, —but, in general, it is an entire sand, and covered with the cypress, the pine, and the spruce-fir. Within three miles of its N.W. termination, there is a small round lake, not more than a mile in diameter. Within a mile of the termination of the Portage, is a very steep precipice, the ascent and descent of which appear to be equally impracticable in any way, as it consists of a succession of eight hills, some of which are almost perpendicular: nevertheless, the Canadians contrive to surmount all these difficulties, even with their canoes and lading." The precipice, which rises upwards of 1000 feet above the plain, commands a most extensive and romantic prospect, embracing the valley of the Swan river.—The *Slave Lake* lies between the parallels of 60° 38′ and 63°, and 110° and 119° W. long.; being 270 miles in length, and about 1000 in circumference. It receives, by *Slave River*, the waters of *Lake Athapescow*, formed by the river of that name, and into which the *Peace River*, or *Unjigah*, flows, when full; and it discharges itself at its N.W. extremity, through *Mackenzie's River*, into the Frozen ocean, in 70° N. lat. *Churchill River*, (called also *Missinippi*, or 'great water,') which empties itself into Hudson's bay, is likewise connected, by means of lakes, with the river Athapescow, which forms the lake of that name;—"an invaluable communication," Malte Brun remarks, "had it taken place in a more temperate climate." But here, even under the 57th parallel, the severity of the winter is extreme; and nothing can be more terrifically desolate and repulsive than the barren and rocky shores of Hudson's bay.

Hudson's Bay.] Hudson's Bay is an extensive inland sea, enclosed, as it were, in the bosom of the country. It extends from Moose Fort, at the head of James's bay, in 52° N. lat., to the head of *Repulse bay*, in the 67th degree; being above 1000 miles in length, and about 600 at its greatest breadth. This bay, on the south side, verges into what is called *James's bay;* on the W. side lies *Button's bay.* These three bays are named from their discoverers; but the two latter are, in reality, only small portions of the former. The entrance into this bay is from the S.W. side of the commencement of Davis's strait, and is called *Hudson's strait.* This strait is divided by islands into three parts; that on the south side is largest, and is properly called *Hudson's strait;* that on the north side is next in magnitude, and is called *Cumberland strait;* that in the middle is least in size, and appears to be much embarrassed with islands; it is called *Frobisher's strait.* Cumberland and Frobisher's straits are but little known; Hudson's strait is much better known, being yearly passed by the traders of the Hudson's bay company. *Belleisle strait* separates the south-eastern extremity of Labrador from Newfoundland.

Climate and Soil] We have already had occasion to remark, that the American climate is remarkably cold, in proportion to the distance of the several countries from the equator; it is almost needless to repeat, in this place, therefore, that New Britain partakes of the general nature of the country. That part of New Britain which contains the principal set

tlements, is situated between the same parallels with Great Britain; some resemblance might be expected to exist, therefore, in the temperature of the atmosphere in the two countries; but while, in this country, our winters are generally moderate, those in New Britain are very intense. The severity of the cold may be known by the effects produced by it: wine is frozen into a solid mass, and brandy is coagulated into a species of thick oil,—the breath is condensed as it leaves the mouth, and, when in bed, forms on the blankets a kind of hoar-frost. Great Britain, it is true, enjoys a more temperate atmosphere than the neighbouring continent of Europe in the same latitude; but, even in the northern parts of Russia, though much farther removed from the equator, there is seldom felt a degree of cold equal to that common in New Britain. It has also been asserted that, in New Britain, contrary to what is generally experienced in other regions, the cold is more intense on the sea-coasts than in the inland parts. To account in some degree for this, it may be observed, that very little of the coast of this country is bounded by the ocean: the chief parts of the sea upon which it borders are Davis's straits, Hudson's strait and bay, and James's bay. Now, these bodies of water, though of considerable magnitude, are not sufficiently large to check the influence of the wind proceeding from the frozen region in the north-west: the consequence is, that they are almost entirely covered with ice during six months of the year, and thus, instead of mitigating the cold, they add considerably to its force. It has farther been observed, that the inland country in New Britain is elevated and dry, unacquainted with fogs, and accordingly healthy,—while the coasts are low, marshy, exposed to frequent fogs and moist weather, and consequently highly noxious to the human frame. The former is abundantly fertile in spontaneous productions, and, by being cultivated, becomes a very agreeable country; the latter is dreary and unproductive, and scarce affords either food or shelter to those wild beasts by which it is frequented. In winter, the aurora borealis is very frequent; it is sometimes of the pale yellow colour which with us it generally exhibits, and sometimes of a blue, black, or flame colour, with corruscations extremely vivid. The sun is frequently surrounded with a halo or circle, and mock suns are often seen. In the northern parts the land is barren and comfortless: in the southern parts it is more fertile, and offers sufficient encouragement to him who would bestow the proper cultivation. On the coasts, the country chiefly produces pines, birch, larches, and willows, but the trees are stunted and knotty. In the interior parts the same kinds of trees are more abundant, and of great size. At York Fort, and Churchill settlement, the climate and soil is such, as to bring to perfection almost every species of European grain and garden vegetables.

Productions.] With regard to vegetable productions, it is believed that, in many places round Hudson's bay, this country is capable of bringing to perfection most kinds of grain. In those parts of the country which are possessed of a tolerable degree of fertility, the productions are said to be more various than those of Canada. Iron, lead, copper, and marble, have been found in the mountainous parts. Some parts abound in excellent coal, which will be very beneficial should the country ever come to be more closely inhabited.

Animals.] In New Britain are found deer of various species, elks, stags, bears, buffaloes, wolves, foxes, beavers, lynxes, otters, wild cats, squirrels, hares, and ermines. It deserves to be remarked, however, that not only

here, but in every cold country, the greater part of animals, during winter, acquire a kind of hair or down, much longer, thicker, softer, and consequently much warmer than their summer-dress; during the latter season they are, as in other countries, of different colours; but during the former they assume the colour of snow. The feathered tribes are numerous. Many which, during summer, abound in this country, abandon it in winter, proceeding then southwards to more temperate climates. Of those that remain, several, like the quadrupeds, assume, during winter, the white dress, which in that season is here most universal. Game abounds so much, that it is nothing uncommon for 10,000 geese to be killed during a winter at the factories. The seas and lakes abound in fish, particularly whales, morses, seals, cod and white fish, pike, perch, carp, and trout. These might, perhaps, be made the source of more wealth, and become of infinitely greater utility to mankind than the furs which form almost the only trade in this part of the British colonies.

Inhabitants.] The aboriginal inhabitants of the various parts of this country may be generally divided into the *Southern Indians*, the *Northern Indians*, and the *Esquimaux*.—The *Southern Indians* inhabit the country situated between the S. coast of Hudson's bay and the territories of Canada, and that part of the western coast of the bay lying to the S. of Churchhill river, and reaching inland to the lake of Athabasca. For a general description of these tribes, and the other principal North American tribes, we refer the reader to a former chapter. The chief of these tribes are the *Ne-heth-a-wa*, the *Assinne-poetuc*, the *Fall*, the *Sussee*, the *Paegan*, and the *Blood Indians*.

Northern Indians.] The *Northern Indians* inhabit that large tract of country lying between the 59th and 68th parallels of N. lat., and which extends upwards of 500 miles from E. to W. Their country is bounded by Churchhill river on the S., by the country of the Athabasca Indians on the W., and by Hudson's bay on the E. The Northern Indians subsist by hunting and fishing, but are by no means skilful in these operations. In summer they eat berries of the whortle and other species, and occasionally feed on a kind of unctuous clay. They are quiet and patient, very limited in their ideas and powers of understanding, and so indolent, that numbers of them perish every year from famine. Suicide is not uncommon among them. Their women are low in stature, and of a delicate shape; they are rather the slaves than the companions of the men. It is nothing uncommon to see them carrying a burden of eight or ten stone weight, or dragging a much greater weight in a sledge. They have also to dress the deer-skins, cook the victuals, make the clothing, pitch the tents, carry home the fish and game when killed, and perform all the drudgery of drying and preserving them for use. A plurality of wives is customary, every man taking as many as he chooses, or can maintain; six or eight are sometimes seen in one family, and they are kept or put away at the pleasure of the husband. The Northern Indians, from scarcity of fuel, are often obliged to eat their food raw; indeed they sometimes do this from choice, especially when the meal is of fish.

Esquimaux.] The Indian tribes are thinly scattered over the surface of North America as far N. as the parallel 68. Here they are succeeded by the *Esquimaux*, a race entirely dissimilar in manners and character. This name, which has been given them by the Indians, signifies 'eaters of raw flesh.' Their colour is not that of copper, but the tawny brown which distinguishes the inhabitants of the more northern parts of Europe; they

all have beards, and some of them have been observed with hair of different colours, in some fair and in others red. These marks, by which they are so evidently distinguished from the Americans, have inclined several philosophers to believe that they are of European descent. The red and fair hair found in the N. of Europe more frequently than in any other country of the world; but above all, their language, which is said to be a dialect of that spoken in East Greenland, the inhabitants of which are believed to have emigrated from Europe, give to this conjecture a considerable appearance of probability. The Esquimaux are dwarfish in size, and more bold and crafty than the Indians; but they use their women much better, and display a higher degree of intelligence. They occupy the shores of the Polar sea, and live chiefly by catching whales, an operation which requires them to combine in large parties, and to this circumstance Dr Richardson attributes the superior capacity they display for civilization. "It is a singular fact that tribes of this description, agreeing in form, features, and manners, and apparently of kindred race, occupy the whole shores of the Polar sea in Europe, Asia, and America. One would almost suppose that this variety of the human species had been created expressly to tenant those frozen regions to which their mode of life appears to attach them, as the Negro seems adapted by an opposite organization to the scorching heats of the torrid zone."

The Esquimaux seen by those who have visited Hudson's straits, are always clothed in skins. They have boots or stockings reaching the knees; breeches loose at the knees, and drawn round the waist with strings, in form of a purse; on their body they wear a kind of coat, which is drawn on like a shirt, and has a hood to cover the head, and two flaps, one before and another behind, descending considerably lower than the border of the other parts of the garment. The seams of these garments are neatly and strongly sewed with the dried sinews of deer and other animals, and their borders ornamented with stripes of the most beautiful furs. The dress of the women is little different from that of the men: their hoods are somewhat larger, the flaps of their upper garments before and behind descend farther, and their boots are wider, and extended with whalebone, so that, on some occasions, they are used as cradles for their children.

Their canoes are of two kinds; the larger sometimes capable of carrying upwards of 40 persons,—the smaller seldom carrying more than one. They are very different in their forms. The small canoe is extremely long in proportion to its breadth; and both ends, which are a little raised, terminate in a sharp point; the frame consists of slender ribs, supported by spars, the whole length of the canoe, and fastened with bandages of split whalebone; above and below, it is covered with skins dressed into a kind of parchment, and sewed tightly to the frame, leaving only one circular hole, equally distant from the two ends, just sufficient to receive one person, and fitted with a kind of hoop to tie round the waist, to keep him firm in his seat, and prevent the water from entering. Seated in this manner with his paddle, which has a blade at both ends, and with which he strikes on each side alternately, he proceeds at a rate not less than seven or eight miles an hour. Harpoons and other fishing-instruments are secured upon the upper side of the canoe with straps of leather. The large canoes are in shape more like our boats; their length is generally equal to four times their greatest breadth, and the stem is somewhat more pointed than the stern, which is round. Like the smaller canoes these are composed of ribs, held together by long spars, and covered with skins, which

are sewed to the upper spar on the ledge, and leave the whole upper part open. These are called women's boats, because they are not navigated by men, and are used only for transporting their families and effects from place to place. They have no seats, so that those who row them must stand.

The Esquimaux are tractable in their commercial dealings; to such Europeans as have fallen in their way, they have shown themselves expert and intelligent. Their religious notions are similar to those of their brethren of Greenland. Several missionary stations have been likewise formed amongst them by the Moravian brethren, by whose means many of these miserable beings have been converted to Christianity, taught to read, and furnished with the Holy Scriptures in their own tongue.

Settlements.] In this country there are but few white inhabitants. The Hudson's bay company have six settlements: viz. *Churchhill*, *York Fort*, *Severn House*, *Albany Fort*, *Moose Fort*, and *East Main.*

Commerce.] The regions round Hudson's bay were not long discovered before they were found to abound in furs; and these furs, being greatly in demand, yielded very extensive profits to those who could procure them in sufficient quantities. In 1600, a company was embodied by charter to trade to Hudson's bay for furs. This company, for some time after it was instituted, is said to have exerted itself with much vigour, and to have taken measures, not only for its own immediate emolument, but for the ultimate benefit of the country which afforded it so much wealth. In more modern times, however, they have been accused of having adopted a line of conduct less conducive to the advantage, either of their own country, or of that with which their trade is conducted. They bring home annually, upon an average, about 47,600 skins. Their imports are valued at about £29,340, from which the revenue receives about £3,734, Their exports generally amount to £16,000. A rival body, called the *North-West Company*, has been recently erected at Montreal. In addition to the fur trade carried on by these companies, the annual produce of the fisheries on the coast of Labrador, has been calculated at about £50,000.

Historical Notice.] When the French laid claim to that extensive country which, in their maps, they called Canada, part of New Britain was included within their limits, and the settlements of the Hudson's bay company were often disturbed by their inroads. The French were apprehensive that these settlements might allure the Indians towards them, and thus turn from the former an advantageous branch of commerce. Every opportunity, therefore, was seized to distress them; and, in 1686, during a profound peace, the Chevalier de Troyes invaded the territory claimed by the company, and made himself master of all the English settlements, except Port Nelson; but, during the first war thereafter, in 1693, they were all recovered by the English. They were again reduced by the French, in 1711; but, in 1713, were restored to the British by the peace of Utrecht.

CHAP. II.—CANADA.

Boundaries and Extent.] CANADA, in its present boundaries, differs from Canada, or the province of Quebec, in its former dimensions; and both are different from that extensive country which was denominated Canada by the French. It is situated between 42° 30′ and 50° N. lat.; and between 64° and 97° W. long. It is bounded on the N. by New Britain; on the E. by the gulf of St Lawrence, and part of New Bruns-

wick; on the S.E. and S. by several districts of the United States, the district of Maine, New Hampshire, Vermont, New York, and the lakes.[1] The western boundary has never been accurately defined.

Upper Canada, formerly called the Upper Country, is situated on the N. side of the great lakes; and is separated from New York by those lakes, and the river St Lawrence. It extends between 42° 30′ and 50° N lat. Lower Canada lies E. from Upper Canada, on both sides the river St Lawrence, between 45° and 50° N. lat., and 64° and 71° W. long The division of this country into the two provinces of Upper and Lower Canada, took place by an act of 31 George III. They are separated from each other by the river Utawa; or more accurately by a line which commences on the N. bank of the lake of St Francis, on the river St Lawrence; runs thence in a northerly direction to the Utawa river; and then due N. till it reaches the boundary of Hudson's bay.

Historical Notice.] Canada was discovered by Sebastian Cabot, when, under a commission from Henry VII. of England, he endeavoured to explore a north-west passage to China and the East Indies. The French endeavoured to make settlements for the purpose of fishing on the coasts of Newfoundland, as early as the beginning of the 16th century. These attempts, however, did not succeed. At the beginning of the 17th century, a new source of wealth was discovered in Canada. A French sea-officer, called Chauvin, and a merchant of St Maloes, called Pontgrave, sailed to Canada, and brought thence a cargo of furs which they disposed of to very great advantage. Chauvin made another voyage, equally profitable, but died when preparing for a third. The profits thus acquired convinced the French of the value of possessions in Canada; and Pontgrave was despatched with a powerful armament to make a settlement upon the river St Lawrence. He sailed in 1603, and, although, by perseverance, the colony at length became respectable, it was only by a progress extremely slow, and attended with many discouraging circumstances. In 1608, Quebec was founded, which immediately became the capital of the colony, and has continued to be so ever since. During the infancy of the settlement, the French were involved in almost continual wars with the Indians; and were, several times, on the brink of being exterminated, or expelled from the country. In 1761, the French were driven from the country; and, in 1763, the whole territory of Canada was ceded to the British, in whose hands it has ever since remained.

Coasts.] The sea-coast of Canada and Nova Scotia is equal in extent to that of the United States, and very superior to it for the formation of a navy, and the support of a maritime population. Commencing at the noble bay of Passamaquoddy and its islands, where the American line now terminates, we find the inhabitants mostly sea-faring people. The town of St Andrews is rapidly rising into mercantile importance, and is resorted to by numbers of European fishing and coasting vessels. Hard by is the

[1] The boundary line along the lakes commences from the point where the 45th degree of N. lat. strikes the river Iroquois, or Cataragui, along the middle of said river into Lake Ontario, through the middle of said lake, until it strikes the communication by water between that lake and Lake Erie; thence along the middle of said communication into Lake Erie through the middle of said lake, until it arrives at the water-communication into Lake Huron; thence through the middle of said water-communication into Lake Huron; thence through the middle of said lake to the water-communication between that lake and Lake Superior passing to the north and east of Isle a la Crosse, until it strikes a line passing across the river at the head of St Joseph's island, and at the foot of the Neebish rapids, which line denotes the termination of the boundary directed to be run by the 6th article of the treaty of Ghent.

town of St John's at the mouth of the fine river of the same name, down which timber is floated in immense quantities for exportation to Great Britain. Ship-building is also carried on in the river to a great extent. The southern and eastern sides of Nova Scotia, from Cape St Mary's to Cape North on the island of Cape Breton, may be called, the fishing-coast, and are peculiarly adapted to produce hardy and enterprising seamen. They abound with numerous and commodious harbours, capable of affording shelter to the largest vessels. The gulf of St Lawrence may be said to be whitened with the canvass of vessels engaged in the timber trade, in the Labrador and coasting fisheries, and in carrying supplies of European and West India produce, not only for the consumption of the inhabitants of this coast, but of the rapidly increasing population of Upper and Lower Canada.

Rivers.] The principal river of Canada is the *St Lawrence*, which is justly entitled to rank in the first class of rivers. Its length, from where it issues from Lake Superior, to its mouth, is 2,500 miles. It is 90 miles wide at its mouth, where it is divided into two channels by the island of Anticosti, which is about 120 miles long and 30 broad. It is navigable for ships-of-the-line as high as Quebec, or nearly 400 miles from its mouth; and for ships of a large size as far up as Montreal, 180 miles above Quebec; while ships of the largest size may be navigated on the lakes through which it flows, at a distance of 2000 miles from its mouth. It receives in its course a great number of smaller rivers, several of which are of considerable size. Of these rivers, which flow chiefly from the north, the following are the most remarkable: the *Saguenay*, a very deep and rapid river, which takes its rise from the lake St John, and after running a course of 150 miles, falls into the St Lawrence, at Tadousac,—the *Montmorency*, which abounds in cascades, and flows into the St Lawrence, 8 miles E. of Quebec,—the *Chaudiere*, which flows from lake Megantic, and after running a course of 120 miles, falls into the St Lawrence, 8 miles to the S.W. of Quebec,—the *St Ann*, a considerable river,—the *Jacques Cartier*,—the *Sorel*, or *Chambly*, arising from lake Champlain,—and the *Outaouais*, *Utawa*, or Grand River, the largest of all the tributary streams of the St Lawrence, it issues from various lakes in Upper Canada, and pours its bright greenish waters into the St Lawrence, a few miles above Montreal. The course of the St Lawrence frequently presents scenes of the greatest beauty, especially in that part called 'the Lake of the Thousand Islands.'

LAKES.] There are many lakes in Canada, but there are four much superior to the rest in magnitude, and which merit a place in a general account of the face of the country. Of these, the chief is *Lake Superior*, formerly, from its situation, called the *Upper Lake*.

Lake Superior.] This is the largest body of fresh water in the world, being 400 miles in length, 100 at its greatest breadth, and—according to the most moderate calculation—not less than 1200 miles in circumference. Its shores are rocky and uneven, and it has a rocky bottom. Its waters are pure and transparent; and it has been remarked, that, although during the summer, the waters on its surface be warm, nevertheless, by letting a cup down about a fathom, water may be taken up nearly as cold as ice. It abounds in fish, particularly sturgeon and long trout, many of which are from 50 to 70 pounds weight, and constitute the principal food of the Algonquin Indians on its borders. This lake has five large islands, one of which, called *Isle Royal*, is not less than 100 miles in length, and in some places 40 in breadth. More than 40 rivers discharge themselves

into it. The two largest of these, called the *Nipegon*, and the *Michipicooton*, are upon the N. and N.E. sides of it. A small river which runs into it not far from the Nipegon, falls from the top of a mountain more than 600 feet perpendicular; appearing at a distance—to use Mr Carver's homely comparison—like a white garter suspended in the air. On the banks of one of the rivers which fall into its south side, virgin-copper has been found. The storms which occur on this lake are felt as severely as on the Atlantic, the waves run equally high, and the navigation is perhaps more dangerous. Notwithstanding its being fed by so many rivers, it has only one outlet by the straits of *St Mary*. At the upper end of these straits there is a rapid, which cannot be ascended, but has been sometimes descended, although this descent requires both skill and caution, and, perhaps, not a little good fortune. A canal has been cut by the North-West Company, along the northern bank, for the purpose of facilitating their commerce, and they have here a considerable establishment; but their chief fort and storehouses are situated at Kamenestiquia, on the banks of a river which flows into Lake Superior, on the N.W. side, and which affords an easy communication with the interior. The strait of St Mary, it is supposed, does not discharge one-tenth of the waters which the lake receives from its numerous rivers; how the remainder is discharged, or whether it escapes by evaporation, remains a secret. It does not appear, however, that an exact calculation has hitherto been made, either of the quantity discharged, or of the quantity received.[1] This lake lies between 46° and 50° N. lat., and 84° and 93° W. long.

Lake Huron.] Lake Huron, into which Lake Superior discharges itself, is 250 miles in length, and about 1100 miles in circumference, and lies between 42° and 46° N. lat., and 79° and 85° W. long. Near the centre its depth is said to be unfathomable. Its form is triangular; and it likewise contains many islands; one of these, on the north side, is about 100 miles in length, and not more than 8 miles in breadth; it is called by the natives *Manataulin*, or 'the place of spirits,' being supposed by them to be the habitation of a supernatural race of beings. A vast plain separates this lake from the Lake Michigan, which is claimed by the Ottowaw and Chippeway tribes of Indians.

Lake Michigan.] Lake Michigan, formerly called *Lake Illinois*, and *Lake Dauphin*, extends from the western angle of Lake Huron in a southerly direction, and is separated from Lake Superior by a tongue of land about 30 leagues in length. It lies wholly within the territory of the United States, between the parallels of 42° and 46°. Its length, from north to south, is 260 miles by a mean breadth of 50, and its circumference is 945 miles. Its waters are said to be unfathomable. At the southern extremity of Lake Michigan, is the *Chicago creek*, by which, in the rainy season, the head-waters of the Illinois communicate with the lake; but the bar at the mouth of the creek does not admit boats drawing above two feet water. A number of streams flow into the lake on both the western and the eastern sides. It abounds, like the others, with excellent fish.

[1] When the wind blows from the east, the waters are driven against the high rocks of the northern and western shore, where they form a thick vapour resembling rain; and this action of the wind creates an irregular ebb and flow. This never exceeds 10 or 12 inches; but the strong traces of the water on the rocks of the shore, show that, at no very remote period, they were elevated six feet above the present level. Some years ago, Mackenzie states, the waters suddenly withdrew near the Great Portage; then rushed back with great velocity above the common mark; and, aft rising and falling during several hours, they settled at their usual level.---*Modern Traveller.*

Lake St Clare.] From the southern corner of this lake, the waters issue by a strait, which swells into the *Lake St Clare*. This lake, though about 90 miles in circumference, scarcely deserves to be mentioned with the immense bodies of water on both sides of it.

Lake Erie.] After passing this lake, the waters again pass through a strait called *Detroit*, and fall into the *Lake Erie*. The length of the Lake Erie, from E. to W., is 225 miles; its mean breadth is only about 40, and its circumference 610. Its depth varies from 40 to 300 feet. It lies between 41° and 43° N. lat., and between 78° and 83° W. long. It has comparatively but few islands, and those lie chiefly towards its west end. Near the shores of these islands, the water, for many acres, is covered with water-lilies, on which water-snakes in innumerable quantities lie basking in the sun. The elevation of Lake Erie above the tide-water of the Hudson river at Albany is 565 feet, with which it communicates by a canal 356 miles in length.

Straits and Falls of Niagara.] By another strait at its N.E. end, this lake communicates with the Lake Ontario. This strait is called Niagara, and presents the most stupendous cataract in the whole world. Those who first visited these falls, struck no doubt with their terrific appearance, and wishing to convey to others magnificent ideas of what they had seen, gave the world very exaggerated accounts of them. Father Hennipin, for example, asserts that the precipice which produces the cataract is not less than 600 feet high, and that the noise is such, that people distant from it several miles cannot hear each other speak. However, it may safely be maintained that no description can convey an adequate idea of their awful sublimity. The most satisfactory account which we have hitherto seen of these falls, is that published in the American Philosophical Transactions, by Mr Ellicot. "Lake Erie," he observes, "is situated upon a horizontal strata, in a region elevated about 300 feet above the country, which contains Lake Ontario. The descent which separates the two countries is in some places almost perpendicular; and the immense declivity, formed by these strata, occasions both the cataract of Niagara, and the great falls of Cheneseco. This remarkable precipice generally runs in a south-western direction, from a place near the bay of Torento, on the northern side of Ontario, round the western angle of the lake: from thence it continues its course generally in an eastern direction, crossing the strait of Niagara and the Cheneseco river, till it is lost in the country towards the Seneca Lake. The waters of this cataract formerly fell from the northern side of the slope, near the landing-place, but the action of such a tremendous column of water, falling from such an eminence, through a long succession of ages, has worn away the solid stone for the distance of seven miles, and formed an immense chasm, which cannot be approached without horror. Down this awful chasm, the waters are precipitated with amazing velocity, after they make the great pitch; and such a vast torrent of falling water communicates a tremulous motion to the earth, which is sensibly felt for some poles round, and produces a sound which is frequently heard at the distance of 20 miles. Many wild beasts that attempt to cross the rapids, above this great cataract, are destroyed; and if geese or ducks inadvertently alight in these rapids, they are incapable of rising on the wing again, and are hurried on to inevitable destruction. The great height of the banks renders the descent into the chasm extremely difficult; but a person, after having descended, may proceed to the base of the falls; and a

number of persons may walk in perfect safety a considerable distance between the precipice and the descending torrent; where conversation is not much interrupted by the noise, which is not so great here as at some distance. A vapour or spray, of considerable density, resembling a cloud, continually ascends, in which a rainbow is always seen when the sun shines, and the position of the spectator is favourable. In the winter this spray attaches itself to the trees, where it is congealed in such quantities, as to divest them of their smaller branches, and produces a most beautiful crystalline appearance; a circumstance which attends the falls of Chenesee, as well as those of Niagara. A singular appearance is observed at these falls, which has never perhaps been noticed by any writer. Immediately below the great pitch, a commixture of foam and water is puffed up in spherical figures, about the size of a common hay-cock. They burst at the top, and discharge a column of spray to a prodigious height; they then subside, and are succeeded by others, which exhibit the same appearance. These spherical forms are most conspicuous about mid-way between the west side of the strait, and the island which divides the falls, and where the largest column of water descends. This appearance is produced by the ascension of the air, which is carried down by the column of falling water in great quantities to the bed of the river. The river at the falls is about 743 yards wide, and the perpendicular pitch is 150 feet in height. In the last half mile, immediately above the falls, the descent of the water is 58 feet; but the difficulty which would attend the business, prevented me from attempting to level the rapids in the chasm below; though, from conjecture, I concluded that the waters must descend at least 65 feet; and from these results it appears, that the water falls about 273 feet in the distance of about seven miles and a half."

Lake Ontario.] The strait of Niagara falls into the *Lake Ontario*, which is the last of this great chain of lakes. It is of an oblong form, its greatest length being from S.W. to N.E., in which direction it measures 160 miles, and its circumference about 600 miles. It lies between 43° and 45° N. lat., and 76° and 79° W. long. Its islands are 19 in number, and it receives some rivers, the chief of which is the *Oswego*, which enters it on the S. side. On the N.E. it discharges itself by the St Lawrence. "A very few years ago," says a lively writer, "and this inland sheet of water was still the 'wild Ontario,' whose waves were unbroken, save by the light Indian canoe, and on whose desert shores the stillness of the primeval forest was disturbed only by the howling of wolves, or the more savage cries of the native hunter of the wilderness. But the sight of ships of war, and steam-packets conveying crowds of passengers across the lake, now puts to flight all these poetical images, and diverts the thoughts to very different speculations. Even the great cataract of Niagara, which so lately could not be reached but by a long and toilsome journey through the pathless forest, loses somewhat of its sublimity in the eyes of the traveller who has been carried to its very brink in a mail-coach."

Falls of Montmorenci.] The *Montmorenci* river, near the junction with the St Lawrence, 5 miles N. of Quebec, forms a perpendicular cataract of about 220 feet in height, with a breadth of 50 feet.—The beautiful falls of the *Chaudiere* also occur at its junction with the St Lawrence. The former river is here about 240 yards in breadth, and precipitates itself over a red clay-slate rock of 100 perpendicular feet.—

The falls of *Shawinnegamme* occur in the river St Maurice. The torrent rushes down about 100 feet into a dark sombre rock. Its total width is perhaps 60 yards.

Mountains.] Immense branches of the Rocky mountains stretch into the Canadian provinces from the west. They completely encircle lakes Winnipeg and Superior, and separate the waters that fall into them northward and southward, advance along the course of the St Lawrence, and again divide the tributary streams of that river from those which fall into Hudson's bay. They are characterized by all the boldness and ruggedness of what may be called their parent-stem, and are interspersed with the same variety of lofty plains, immense woods, and waters of every shape and name.

Climate.] The air of Canada is very cold, if compared with its distance from the equator. Its situation is farther removed from the pole than that of Great Britain; yet its winters are much longer and more severe than any thing known in this country. The climate of Lower Canada, however, has been observed to be rapidly ameliorating; and it has been ascertained, by a meteorological table, that the medium cold of its winter has lost 8 degrees of its former severity in the neighbourhood of Quebec. The St Lawrence also is nearly a month later in being shut up than when Canada was first settled. Weld assures us that almost every part of the upper province is unhealthy. The fact seems to be, that like other countries of the same latitude, its character for healthiness varies in different situations and seasons. The western extremity, which has permanently a greater proportion of heat, is less healthy than the more eastern districts lying between the St Lawrence and Ontario. They know little, in Canada, of what may be properly called spring: summer immediately succeeds the winter with a quick and luxuriant vegetation, and in midsummer the heats are little less intense than the cold in winter. The winter, however, although very severe, is not without its enjoyments. The Canadians always take advantage of this season to visit their friends who live at a distance. By means of *carioles*, or sledges, they transport themselves over the snow in a most agreeable manner, and with a degree of swiftness that appears almost incredible: for, with the same horse, they will go 80 miles a day, so light is the draught of these vehicles, and so favourable is the snow to the feet of the horse.

Soil and Cultivation.] The northern parts of Lower Canada are too barren to be cultivated with any success, and, even in the neighbourhood of Quebec, the crops of grain seldom exceed 12 bushels to the acre. The settlements of this province are chiefly upon the banks of the St Lawrence, the soil of which gradually improves as you ascend the river, and, in the vicinity of Montreal, in latitude 45° 30′, the crops of wheat are tolerably productive. There are also some good orchards in this part of the country, the proprietors of which generally send their produce to Quebec, where fruit-trees are extremely rare. The wheat is sown early in May, and is generally ripe by the end of August. Small quantities of maize are also planted, and a little tobacco. The grass land is good, even as low as Quebec. Good arable land, in the best situations, sells for £5 per acre; indifferent land, for 4 or 5 dollars; wood land for 2 dollars; but in the back townships it may be purchased, at the sheriff's sales, for less than sixpence an acre. From Montreal, the soil gradually improves all through Upper Canada, where it as much surpasses that of Montreal, as Montreal surpasses Quebec. The climate, too, is much more mild

than that of the lower province, (though still much colder than that of England) and is generally preferred by the emigrant. It is by some called 'the Garden of America,' being in the highest degree fertile, and subjected neither to the very long winters of Lower Canada, nor the scorching summers of the United States. "In travelling from Montreal to La Chine," Howison says, "the air was so pure and transparent, that every beam of the sun seemed to reach the earth in unimpaired brilliancy, quickening the luxuriant verdure that covered the fields, trees, and shrubbery."

When in an uncultivated state, the quality of the soil is known by the timber which it produces. The larger and heavier the species of timber produced, the more excellent the soil. All parts of the country which have not been cleared for the purpose of cultivation, are covered with timber of all sizes. He alone who has visited these regions of interminable forests, can form an adequate idea of their dreariness; and even when the dull uniformity is occasionally broken by the appearance of the first feeble attempts at cultivation, the view that presents itself is hardly more attractive,—a formal angular notch cut out in the forest,—hemmed in on all sides with lofty trees devoid of lateral branches, and blackened and scorched by fire,—the interior covered with unsightly stumps, and intersected by zigzag irregular fences,—and in the centre the small log-house of the proprietor,—form a very cheerless and unpicturesque scene.

Animals.] As the greater part of the animals peculiar to North America are found within the bounds of Canada, to prevent repetition, they may be described here. Of buffaloes there are three kinds: the buffalo properly so called, the musk-bull, and the bison. The buffalo has a striking resemblance to the common ox, both in its appearance, and in its habits: nevertheless, it is said to be a species entirely distinct. It is larger than an ox, high upon the shoulders, and deep through the breast. The flesh is used as beef; the hide makes good leather; and the hair, which is woolly, has been manufactured into a kind of coarse cloth. The musk-bull is so called from a strong smell of musk of which its flesh cannot be divested. It has a hump on its shoulders, and very long hair of a dusky red colour. They herd together, abound chiefly in rocky and mountainous countries, and ascend the steeps with much agility. The bison, though more unlike the ox than the buffalo, is nevertheless found to be of the same species with the former. It is larger than the domestic ox, and has a bunch on the back which is covered with long woolly hair. There are several varieties of the deer kind in this country. The great stag, or round horned elk, is a very large animal, nearly 5 feet high; and about 9 feet in length from the end of the muzzle to the insertion of the tail. The horns are not palmated, but when full grown, measure about 6 feet from tip to tip. Its hair is long, of a dark dun colour on the back and sides, and brown on the head and legs. The moose deer is of two kinds, the black and the gray; both of which are, perhaps, the largest of the species. The former is said to be from 8 to 12 feet high; the latter is generally taller than a horse; both have broad palmated horns, weighing from 30 to 40 pounds. They feed on herbage and the young twigs of trees; and in winter are found in great herds. The *caribou*, or rein-deer, is distinguished from other animals of this kind, by its branching palmated horns, with brow antlers. They herd together in great droves, and annually emigrate from north to south, and back again. The stag, or red deer, is of many kinds. Of bears there are two principal kinds, the brown and the black; the latter is almost peculiar to the northern parts of Europe

and America. The brown bear frequents the most retired parts of the forest, and is a solitary savage animal. Its form is too well known to require description. Its senses of hearing, feeling, and smelling, are said to be exquisite. It is remarkably fond of honey and several kinds of fruits. Its voice is deep and surly, and its passions are easily provoked. When taken young, however, it may be tamed. About the end of autumn it retires to its den, and lives for some time, it is said, absolutely without food, in a state of inactivity. At this time the female brings forth her young, and suckles them: she produces two, sometimes three at a time. Of the black bear there are two kinds; one has a thick clumsy body, and short legs, and is generally fat. The other has long legs, is lean, and seems to partake of the nature of the wolf. This animal is carnivorous, the other is supposed to feed chiefly on fruits; the latter retires to his den, and becomes torpid in winter, the former emigrates towards the south. The one is the same with the black bear of Europe, and is confined, in America, to the northern districts; the other corresponds to the brown bear of the Alps, and is found in every part of America. The wolverene, called in Canada the *carcajou*, has some resemblance to the European badger; his length is about a foot and a half, and his circumference two feet; his legs are short, and his paws large and strong. He follows the hunters, and destroys both their traps and the game that may be in them. In Canada wolves are numerous, and different kinds of foxes, as the silver-fox, the red-fox, gray-fox, cross-fox, brandt-fox, and many others. A great variety of the cat kind are found in the northern parts of America. Of these none are more dreadful to the hunter than the catamount, a fierce animal, which flies from no pursuer. The length of his body, including the head, is said to be about six feet; his legs are one foot long, and body about two feet and a half in circumference. He leaps with amazing agility, attacks the largest cattle, and has been known to carry away children. The loup cervier abounds in the northern parts of America, and is valued for his soft warm fur. Neither North America, nor any part of the world, produces an animal more remarkable than the beaver, for the uncommon instincts displayed by it in every part of its life. It is not a very large animal: its length from the nose to the tail, being only about three feet. Its fine fur constitutes a principal article of commerce, and is used in a variety of manufactures. The most valuable kind is black; but this is scarce. The ordinary kind is of a chestnut brown. A few have been found white, and some spotted; but both these kinds are extremely rare. Canada abounds likewise in otters, weasels, ermines, martins, minks, and other animals, valuable only for their furs. Among a great variety of squirrels, is that little animal called the flying squirrel, which, by a kind of membrane, connecting its fore and hind legs, and which it extends at pleasure, can leap much farther, and alight with more security, than other animals of the same species. On the coasts of the gulf of St Lawrence is found the walrus, or sea-horse.

Of the birds peculiar to Canada, we may particularly specify the night-hawk, which is seen chiefly at twilight, and before thunder-storms; the fish-hawk, which frequents rivers and lakes, and is supposed to attract the fish to the surface by a peculiar oil which he emits; the humming-bird, which sometimes occurs in the neighbourhood of Quebec; cranes with bills 12 inches in length; the wood-duck, which roosts on trees, and is remarkable for the brilliance of his plumage, and the delicate flavour of his flesh; and the snow-bird, a kind of ortolan, which announces the return of spring,

and is the principal bird of song in Canada. The earliest travellers in this country observed that large species of poultry which is commonly supposed to be peculiar to Malabar.

Of reptiles we may enumerate 9 different species of tortoises, 8 of frogs, 10 of lizards, and 46 of snakes. The most dreadful animal of this kind is the *rattle-snake*, so well known for the fatal effects of its bite. It has received its name from the rattle which it has in its tail, which consists of joints loosely connected. They grow to the length of 8 feet, and, according to some accounts, they sometimes reach the length of 14 feet. They are viviparous, and, in June, bring forth generally about 12 young ones.[1] Rattle-snakes no longer abound in the settled parts of North America, although they are still numerous in the back country; they chiefly frequent woods and hills. The two-headed snake is by some supposed to be a distinct species, by others it has been reckoned a monstrous production.

Vegetable Productions.] Of native flowering trees, shrubs, and plants, British America produces a vast number of species. There is a sort of indigenous vine, but the grapes are small and acid. Indian corn is a native of America, and is found in almost every part of it. In the interior parts of the country a kind of wild rice occurs, which might be cultivated to great advantage. Almost every species of grain found in the different quarters of the globe has been introduced and naturalized in some part of America. The same may be said with regard to fruits, and garden-vegetables of every description. Musk and water-melons grow in great profusion.

Forest Trees.] The North American forests produce a great variety of different kinds of trees, making excellent timber; many of them of stupendous size, and apparently coeval with the soil on which they stand. The durability of colonial timber, when employed for the purposes of ship-building, is only one-half that of European timber, and it is no longer employed in the royal dock-yards; but of the purposes for which timber is employed, there are some for which American timber is peculiarly fit. Wherever a large surface and freedom from knots are required, this timber is superior to every other. The sounding boards of musical instruments require a larger and clearer surface than Baltic timber can supply. All carving is more easily performed on Ame-

[1] It is described as having a brown head; yellowish back, marked with broad transverse dentated bars of black; scales rough; belly cinerous; the jaws furnished with small sharp teeth; and four fangs in the upper jaw, incurvated, large, and pointed,—the instrument of death. At the base of each is a round orifice opening into a hollow, which near the end of the tooth appears again in form of a small channel; these teeth may be erected or compressed; when in the act of biting they force out of a gland near their roots the fatal poison, which is received into the round orifice of the teeth, conveyed through the tube into the channel, and thence with unerring direction into the wound. These animals, it is said, seldom attack any person unless provoked or injured. Before they bite they give warning, by making a noise with the rattle in their tail. This warning is always given in fair weather, but in wet weather it is sometimes omitted; and, for this reason, the Indians as much as possible avoid, in such weather, to wander in the forests. They have not the power of springing to the attack; so that, by the warning which they give, and the slowness of their motions, they may, in general, be easily avoided. The bite, if upon a vein or artery, produces almost instantaneous death; but if in a fleshy part, the effect is not so sudden, nor so certain. The most effectual cure is immediately to cut or burn out the wounded part. Deadly as the bite of the snake is, the Indians feed on its flesh without feeling any inconvenience; hogs will also eat it, but no other animal has been seen to taste it. Some authors have asserted that the rattle-snake, and several others of the serpent tribe, have the power of charming: meaning by that, some faculty of fascinating animals at a considerable distance, in such a manner as to prevent them from making use of their natural powers of motion towards escape. This fact, however, has never been incontrovertibly ascertained.

rican wood; and for blinds it is also superior. There are some other purposes for which it is equal to European: such as the inferior kinds of packing-cases, window-frames, sashes, doors, window-shutters, and some parts of the inside of buildings. The white-pine, called by way of distinction the mast-pine, is fitter than any other tree to be made into masts. They are of very great size, and have a more majestic appearance than any other tree in the North American forests. They are sometimes found straight and sound, about 8 feet diameter at the butt end, and between 80 and 100 feet in length without branches.[2] The hemlock-tree is a most valuable wood. It abounds in the lower province, and is worked up for bridges, roofs, fences, barn-floors, &c. Under water, no length of time will have the slightest effect on its durability; and it possesses that adhesive nature, that a nail, or tree-nail, once driven, can never be removed. It is not adapted to fine work, but in point of strong durable timber, it has no superior. Again, there is the curly maple, or 'bird's eye,' which in cabinet ware far surpasses, in point of beauty, the Spanish mahogany. The wild cherry wood is also very handsome in furniture. The sugar-maple trees are more numerous here than in the United States; they are to be found in almost every part of the country, and sometimes large tracts of land are entirely covered with them. There are two species: the best will yield about a pound of sugar from three gallons of sap. It is sold at half the price of West Indian sugar.[3] Several other trees are used in the manufacture of pot and pearl-ashes. They yield in the following proportions: one thousand pounds of maple-ashes will make 110 pounds of potash; of oak, 111; of elm, 166; of hickory, 180; and of beech, 219.

Minerals.] It has been reported that North America affords silver-mines. Several are said to exist in Canada; but if they do exist, they have never been wrought, nor any thing extracted from them that can entitle them to become a national concern. Several metals, however, have been found here, which are essentially useful to the human race. Of this kind are copper, iron, and lead. In the two latter articles Canada abounds. Coal is found in many parts of the northern continent; but in Canada, and many other districts, wood is so abundant,

[2] To fell a tree of this extraordinary size, requires great labour; and to prevent it from being hurt in the fall, requires some dexterity. When it has been felled and lopped, the labour is far from being completed. It is still to be conveyed to the nearest water carriage; and if the distance be great, and the way rough, this conveyance is attended with an immense toil, and no inconsiderable danger. Various contrivances have been, from time to time, adopted, to lessen the labour, and diminish the danger. At present they are generally transported to water on two pair of wheels, one pair under each end. The wheels are brought to its side and canted; the mast is fastened to the axes, and a yoke of oxen, by a vigorous pull, bring them up to their proper position. The greatest danger is in passing down a steep hill, or over a sharp ridge. In the former case they are obliged to yoke several oxen behind it, to prevent its too rapid descent. In the latter case, those nearest the draught are often suspended, and sometimes are killed. The value of masts, yards, and bowsprits, according to their various diameters, varies; masts, from 25 inches in diameter to 34 inches, bring L.13 8s. sterling to L.90; yards, 17 inches to 24 inches, L.6 10s. to L.32 sterling; bowsprits, 25 inches to 37 inches, L.2 10s. to L.52 sterling. All these are hewn into the proper shape before the dimensions are taken which determine the value.

[3] The most approved method of obtaining the sap is by piercing a hole with an augur in the side of the tree, of about an inch in diameter, and two or three in depth, obliquely upwards; the common method is by cutting a large gash in the tree with an axe. In either case, a small spout is placed at the bottom of the wound, and a vessel placed underneath to receive the liquor as it falls. A maple tree of the diameter of 20 inches, will commonly yield, for 30 years, sap sufficient for making five pounds of sugar each year. The season for tapping is the commencement of spring, when the sap begins to rise. The sap is boiled until it comes to a proper consistency.

that coals are little sought after. Fine specimens of marble have been recently quarried, and black lead-ore seems to abound in the lower province. There is reason to believe that a vast mass of rich iron-ore extends easterly and westerly from Lake Kamitchigamog, in the Newcastle district, to the Utawa river, in Lower Canada, with occasional breaks and intermixture of other strata, for a distance of nearly 300 miles.

Population.] The population of Canada, when it fell into the hands of the British, in 1760, amounted, according to general Murray's report, to 71,000 inhabitants; but the extensive province of Upper Canada was not then inhabited by Europeans. According to an exact census taken in 1814, the population of Lower Canada amounted to 335,000, of which 275,000 might be called native Canadians; the remainder being a mixture of English, Scotch, Irish, and Americans. It now contains a population of nearly half a million, and affords a militia of 76,000 men.—The population of Upper Canada, in 1814, was nearly 100,000, and since that time, from the immense tide of emigration, both from the mother country and the United States, it has increased to nearly twice that number, and has 44,000 men enrolled as militia. The upper province, on account of the superiority of its climate and soil, and the cheapness of land, is preferred both by the British and the settlers from the United States—which last form the greater moiety of the inhabitants—while the language, habits, and laws, are all purely British. The greater part of the French population is confined to the northern branch of the St Lawrence, from Montreal to Quebec.

Manners and Customs.] A great part of the inhabitants of Canada have no employment during the six months of winter; the high wages, however, which they receive during summer enables the labourer and mechanic to live comfortably through the winter without working. In the country, during winter, they sometimes employ themselves in cutting and carrying home fire-wood; and occasionally they make journeys to the nearest towns, to sell their surplus provisions, and procure for themselves some little comforts, such as snuff, tobacco, spirits, &c. Every person in the country is his own tradesman. The landholders, among the old French settlers, are described as strongly attached to ancient prejudices; but honest, inoffensive, and very hospitable. "Indeed," says Grey, "you need never be at a loss for a house to stop at. There is not a farmer, shopkeeper, nay, nor even seigneur, or country gentleman, who, on being civilly applied to for accommodation, will not give you the best bed in the house, and every accommodation in his power." The following character of the descendants of the old French settlers, contrasted with that of the British or American settlers, from the pen of Volney, himself a Frenchman, may be considered as impartial, and is very interesting: "The American settler, of English or German descent, naturally cold and phlegmatic, sedately forms a plan of managing a farm. He turns his mind, not ardently, but without ceasing, to every thing conducive to its formation or improvement. If, as some travellers have laid to his charge, he becomes idle, it is not till he has obtained the object of his pursuit, what he considers as a competency. The Frenchman, on the contrary, with his troublesome and restless activity, is led by enthusiasm, or some sudden fit, to undertake a project, of which he has calculated neither the expense nor the difficulties. More ingenious, perhaps, he rallies the slowness of his German or English rival, which he compares to that of the ox; but the German or the Englishman will answer, with his cool good sense, that the slowness of the ox

is better adapted to the plough than the fire of the mettlesome racer. And, in fact, it often happens, that the Frenchman, after having done, corrected, and altered, what he had begun, and harassed his mind with desires and fears, is at length disgusted, and relinquishes the whole. The American settler, slow and silent, does not rise very early; but, when he has once risen, he spends the whole of the day in an uninterrupted series of useful labours. At breakfast, he coldly gives orders to his wife, who receives them with coldness and timidity, and obeys them without contradiction. If the weather be fair, he goes out, ploughs, fells trees, makes fences, or the like: if it be wet, he takes an inventory of the contents of his house, barn, and stables; repairs the doors, windows, or locks; drives nails, makes chairs or tables; and is constantly employed in making his habitation secure, convenient, and neat. With these dispositions, sufficient to himself, he will sell his farm, if opportunity offer, and retire into the woods 30 or 40 miles, to form a new settlement. There he will spend years in felling trees; making for himself, first a hut, then a stable, then a barn; clearing the ground and sowing it, &c. His wife, patient and serious as himself, will second his endeavours on her part, and they will remain sometimes six months, without seeing the face of a stranger. But at the expiration of four or five years, they will have acquired an estate that ensures a subsistence to their family. The French settler, on the contrary, rises early in the morning, if it were only to talk of it. He consults his wife on what he shall do, and listens to her advice. It would be a miracle if they were always of the same opinion; the wife argues, opposes, disputes; the husband insists upon or yields the point, is irritated or disheartened. Sometimes his house is irksome to him, and he takes his gun, goes a shooting, or a journey, or to chat with his neighbours. At other times he stays at home, and spends his time in talking with good humour, or in quarrelling and scolding."—" This alone is one of the most distinguishing and characteristic features of the two nations; accordingly, the more I reflect on the subject, the more I am persuaded that the domestic silence of the British Americans is one of the radical causes of their industry, activity, and success in agriculture, commerce, and the arts; and the same applies to the English, Dutch, and other people of the north, from whom they are descended. In silence they concentrate their ideas, and have leisure to combine them, and make accurate calculations of their expenses and returns. They acquire more clearness in their thoughts, and consequently in their expression. Hence there is more decision in their conduct, both public and private, and it is more to the point. On the contrary, the Frenchman, with his perpetual domestic chattering, evaporates his ideas, submits them to contradiction, excites around him the tattling of women, backbiting, and quarrels with his neighbours; and finds at length he has squandered away his time, without any benefit to himself or his family."—" This moral and physical dissipation must have a particular efficacy in rendering the mind superficial; for having several times questioned the frontier Canadians respecting the distances of times and places, or measures of magnitude or capacity, I have found that, in general, they had no clear and precise ideas; that they received sensations without reflecting on them; in short, that they knew not how to make any calculation that was ever so little complicated. But there is not a single American settler, who does not give with precision the number of miles, or hours, and weights and measures, in feet or yards, pounds or gallons, and who

does not very readily make a calculation of several actual or contingent elements. Now this kind of practical science has very important and extensive consequences in all the operations of life; and it may surprise my reader to be informed, that it is much less common among the French, even in Europe, than he would be disposed to imagine."

Emigrants.] The British government has long been endeavouring to direct the current of our surplus population at home towards the unsettled districts of Upper Canada. We feel highly interested in the success of these endeavours, for the question is not confined to the merely ridding the United Kingdom of a surplus population, but it regards the placing of these people in such a relative situation as that they will shortly become contributers to the wealth of the mother country. "With perhaps a few exceptions," says an intelligent settler, "there will not be a family so sent out, when ample scope is given to their labour and industry, but will, in the space of two or three years, be enabled to clothe their families with English manufactures. I have witnessed this effect so strikingly, particularly among the destitute Scotch labourers who have come to this country, that I am warranted in drawing the above conclusion. It is idle to say, because England derives no advantage from direct taxation, that the Canadas are useless to her. Every additional ship employed in this trade increases her commercial greatness, and, what is of equal consequence, enlarges the nursery of her seamen." Some years ago, government, besides granting each person a certain portion of land, allowed a free passage across the Atlantic, and provisions and agricultural implements to each emigrant for one year; but, with the exception of a free grant of 100 acres of land, these encouragements are all now withheld.

Indian Population.] In the foregoing account of the population of Canada, the original natives are not included. As the country is far from being completely settled, the ground already laid out in farms being only about one-tenth of that still lying in woods, the number of Indians found here must greatly exceed those within the confines of the United States. Great numbers of small tribes are scattered among the uncultivated parts of this country, as they are in every part of the North American continent. All the various tribes of Indians inhabiting the British possessions in North America, and the back settlements of the United States, have a strong resemblance to each other, in their general manners and customs. Their progress in civilization—if one may so speak, where so little progress has actually been made—is everywhere the same; they are all in that primary state of society, which by philosophers has been called the state of hunters. It is certainly a mysterious fact, that a race of men should thus have continued for ages stationary in a state of the rudest barbarism, without exhibiting, notwithstanding their intercourse with Europeans, the slightest tendency to improvement.

Commerce.] Canada is a country of considerable trade: possessing not only the advantages of a direct commercial intercourse with the mother-country, and, by means of the latter, with the United States, but also that of supplying our West India settlements with grain and timber, in which a very active trade is carried on, and West India produce received in return. The chief articles of the Canadian trade are furs, peltries, timber, wheat, flour, biscuit, flax-seed, and lumber of various kinds, fish, potash, oil, ginseng, and other medicinal roots. In return it receives rum, coarse cloth, linen, muslins, silks, furniture, wrought iron, brandy, molasses, coffee, sugar, wines, tobacco, salt, chocolate, dry goods, and pro-

visions for the troops; besides, for trading with the Indians, it receives guns, powder, balls, flints, kettles, hatchets, toys, and trinkets of various kinds. In 1806, the tonnage employed in the trade of the colony amounted to 33,996; in 1807, to 42,293; in 1808, to 70,275; in 1810, to 143,893. About 700 sail of vessels now annually proceed up the river St Lawrence, and as many nearly to the ports on the shores of the gulf. In 1825, 1800 sail of vessels ascended the St Lawrence.

Timber Trade.] There are annually about 600 timber freights to this country; a ship performs about two voyages annually, and, consequently, this trade occupies about 300 ships. The value of the saw-mills is estimated at about £150,000. The winter of Canada, during which the timber is felled and hewn, is a season of the most intense and piercing cold. The rivers down which it has to be conveyed are broad, and in many places rapid, and in all places dangerous for the navigation of timber-rafts. On the opening of spring, the timber is immediately launched into the water, and there bound together in separate portions, or *cribs* as they are called; these separate cribs are also bound together, and form what are called *rafts*. These huge masses of timber float down the St Lawrence and the Utawa at the mercy of the winds and waves, which often in one half hour irrecoverably disperse the labour of a whole year. The St Lawrence and the Utawa are continually interrupted by rapids occasioned by sudden and great falls in the bed of the river, and are also constantly spreading out into small lakes of from 30 to 40 miles in breadth, which, even during a slight breeze are extremely hazardous to so unwieldy a machine as a timber-raft. The navigation is consequently so dangerous as to make the safe arrival of a raft at Quebec a matter of equal uncertainty with a prize in the lottery; and it is estimated that one-third of the timber annually rafted is lost. The master lumber-man is usually a small farmer, who, having stores and money advanced by the merchants of Montreal, or the storekeepers of Quebec, neglects and mortgages his farm to try his fortune in a timber speculation; this man is nothing more than the master-labourer. The sufferings that this man and his fellow-labourers undergo in their occupation are incredible. In the depth of the immense forests of Canada, in the most intense cold, the thermometer generally ranging between 10 and 30 degrees below zero, in a rudely constructed hut, made of logs and bark, through which every breath of wind penetrates, do these men pass the whole of the winter. The moment that spring arrives, and the rivers are thawed, they have to pass whole days in the water, employed in binding the timber together. To sustain the cold, they drink raw spirits in quantities which would startle the hardiest European topers.—When the raft is prepared, and the rivers completely thawed, it has to be navigated to Quebec; and now another mode of life begins, and a new course of evils follows. One of them is the almost invariable loss of health: no one ever yet saw an aged raftsman. The intensity of the cold; the long immersions in the water, the excessive use of ardent spirits, and the burning sun of a Canadian summer, would destroy the hardiest constitution that ever existed. Another evil is the sudden transition from great exertion to a state of absolute idleness. A raft may be wind-bound for weeks, and the men cannot be dismissed. Accustomed at one time to strong excitement, he cannot pass to a state of listlessness and inactivity; he must have some other excitement, and hence he almost certainly becomes a gambler. Another and a most serious evil is this, that they live

in absolute impunity, continually passing from one part of the country to another, on a broad and rapid river, where it is almost impossible to find them; and living in large bodies, it is impossible to distinguish the culprit among forty or fifty persons, all perhaps equally guilty; they cannot be made amenable to the laws. "A raftsman," say the Canadians, "is usually possessed, at the end of the summer, of a ruined constitution, spendthrift habits, a blue pair of trowsers, and an umbrella." Extraordinary gains are occasionally realized in the timber trade; and these lucky adventures of the fortunate are usually contemplated by the young speculator, who disregards the thousands who have been ruined by the same business. It is now pretty generally acknowledged, that the protection which is given to colonial timber by the mother country is injudicious. In the first place, it costs Britain not less than £1,000,000 per annum. In the second place, it compels us, as we have already seen, to use timber of an inferior quality; and thirdly, it is not true that the encouragement of this trade is a means of clearing the country. For pine and oak form only about one ten-thousandth part of a Canadian forest, and not one oak or pine in 500 is worth felling.

Government.] Canada, when under the dominion of France, was governed by a viceroy appointed by the French king, and were subject to the laws, or 'customs of Paris,' as they were called.[5] The political establishment of the colonies at present is similar in its great outlines to that of the other North American colonies before the revolution.[6] Canada is governed by a lieutenant or governor appointed by the king, assisted by a legislative council and house of assembly; the former answering to the house of lords, the latter to the house of commons in the British constitution. The governor represents his majesty, and in that capacity gives or refuses his assent to bills originating either in the council or assembly. This assent or refusal must be signified within two years of the time when the bill is presented. The governor is obliged to transmit to the secretary of state copies of such bills as have been passed; and his majesty may confirm or annul them, within two years after the official information. If no notification is made, the bill is understood to be confirmed.

The members of the legislative union, or upper house, are summoned by the governor under the king's authority. They are 22 in number, 7 for Upper, and 15 for Lower Canada. These members continue in office during life, unless their place is forfeited by four years continued absence, or swearing allegiance to a foreign power. The house of assembly, or lower house of parliament, consists of not less than 66 members; 16 for Upper, and 50 for Lower Canada; who are chosen by the freeholders in the towns and counties. In the counties, the

[5] By these 'customs of Paris,' the lords, poor as they were, holding immediately of the crown, gave out portions of their *seignories* to other lords, who again gave out to others some of these lands, all which were subdivided into such small parts as not to be capable of further severance; and so these lands have descended ever since, so that now these subdivisions of property are a source of the greatest difficulty. One may read in a Canada newspaper an advertisement offering for sale 1-300th part of one of these lordships. It is quite a common thing to see and hear of a third of a seventh, or of a half of a sixth, and so on in such a way as makes it quite impossible for any one to know what suit, or service, or fines, he is to owe. Each possession owes various services—as corn to be ground at such a person's mill, with numerous other rights, liabilities, and duties, all of a most vexatious description.

[6] The government of Canada was fixed by royal proclamations, by certain ordinances of the English governors, by 14 Geo. III. c. 83, and at length by the celebrated Quebec bill, 31 Geo. III. c. 31.

electors must be possessed of landed property yielding a revenue of 40 shillings or upwards; and, in the towns, must possess a dwelling-house and plot of ground, to the yearly value of £5 sterling; or must have paid, for one year at least, a rent of £10 sterling per annum. This, in Canada, includes nearly every active male.

The legislative council and house of assembly must meet at least once every year; and the same assembly continues four years, unless sooner dissolved by the governor. The forms of business are nearly the same as in the British parliament: every matter is decided by a majority of votes. His majesty has power to authorize the governor to appoint the time and place of the meetings of the council and assembly, and to prorogue or dissolve them when he shall think proper. These are powers, however, which are seldom exerted.

The governors of the particular provinces are only lieutenants, subject to the control of a governor-general, appointed to direct the affairs of British America. In the absence of the governor-general, the lieutenants are invested with all his powers in their respective provinces. The governor-general is commander-in-chief of all the British forces in these provinces. The governors of provinces, with certain members of the council nominated by the king, form a court of civil jurisdiction, for the determination of important causes and appeals. Their judgment, however, is not final, and an appeal may be made to their superiors in Britain. Disputes concerning property are determined by the laws of Canada: criminal matters are determined by the English laws.

Revenue.] The ordinary revenue of Lower Canada amounts to about £35,000 sterling, which goes to defray the ordinary expense of the civil government. Nearly the same sum is yearly collected under temporary acts of the provincial legislature for various purposes, such as building court-houses, jails, &c. The military expense of the province is defrayed by the British government. The entire annual cost of maintaining Upper Canada is nearly £500,000.

Religion.] When under the dominion of France, the inhabitants of Canada universally professed the Roman Catholic religion, and the Jesuits were possessed of immense wealth in this country. In 1793, his Britannic Majesty erected the provinces of Upper and Lower Canada into a bishop's see; there are not, however, above 20 clergymen of the established church in both provinces. New settlers repairing to Canada are encouraged by government to take out with them ministers of whatever denomination they choose; and 100 acres of ground is appropriated by government for the support of every such minister, which is cultivated for him by his flock. In Lower Canada, the great majority of the inhabitants profess the Roman Catholic religion. The annual expense of the ecclesiastical establishments in Lower Canada is about £6,500. The bishop of Quebec has £2,000; the Catholic archbishop at Quebec, £1,000; the ministers of the Presbyterian churches at Quebec and Montreal, £50 each; and their brethren at Argentuil, £100.

Chief towns.] The capital of the lower province and of British America is *Quebec*, which stands upon the N.W. side of the river St Lawrence, about 400 miles from the sea. The town is divided into upper and lower. Quebec is built upon a rock of marble and slate. Its fortifications, though not regular, are strong; and it is defended by a fine regular citadel. The houses are of stone, and tolerably well-built. The river is here only about one mile wide; though, at a little distance, it

widens to the extent of four or five leagues. It has a safe commodious harbour just opposite to the town, the general depth of which is about 5 fathoms. This harbour is defended by two bastions, 25 feet high, which is about the height of their highest tides. The number of inhabitants is said to be about 22,000. It sends four representatives to the assembly.

From Quebec to Montreal, a distance, by the river, of 180 miles, captain Hall remarks, "may be called one long village. On either shore a stripe of land, seldom exceeding a mile in breadth, bordered by aboriginal forests, and thickly studded by low browed farm-houses, white washed from top to bottom, to which a long barn and stables are attached, and commonly a neat plot of garden-ground represents all that is inhabited of Lower Canada."

Montreal.] Montreal is situated on an island of the same name in the river St Lawrence. This island is about 10 miles in length, and 4 in breadth; and has been brought into an excellent state of cultivation. On the south shore, about a mile and a half from the water, stands the city. It is regularly built, in the form of an oblong square, and must be allowed to be a handsome city. While in possession of the French, it was surrounded with fortifications, to defend it from incursions of the Indians, and the English, to which it was often liable; but of late the ramparts have been levelled, and the ground they occupied laid out in streets, and filled up with elegant buildings. Montreal is the centre of Canadian commerce, and the emporium of the North-west company. In the Montreal Gazette, we find the following comparative statement of arrivals, tonnage, and settlers, to the 24th of September, 1828, and the same date of 1829:

Years.	Vessels.	Tonnage.	Settlers.
1828	512	136,219	11,241
1829	728	198,151	12,861

About half-way between Quebec and Montreal stands *Trois Rivieres*, so called from being situated at the confluence of three rivers. By these rivers many Indians proceed to this town, and exchange their furs for such commodities as they want. The country here is fertile and well-inhabited. There are now steam boats which ply between Quebec and Montreal.

Kingston.] Upper Canada has been lately divided into 10 districts, and nearly 300 townships. The chief town in the upper province is *Kingston*, situated at the mouth of a deep bay, at the north-eastern extremity of Lake Ontario; it contains a fort and barracks, is a place of considerable trade, and is augmenting rapidly in size. All the goods necessary for the support of the upper country are here put in store previously to being sent across the lakes, and here is the emporium for the fur-trade from the various ports on the nearer lakes. The principal merchants resident here, are partners of old established houses at Montreal and Quebec.

Newark.] Niagara (now Newark) was formerly the capital of the upper province, since removed to York. It is situated on the banks of the river of the same name, about 50 yards from the water's edge; the quantity of furs collected here is considerable, and the neighbourhood being populous, a pretty brisk trade is carried on. The falls of Niagara are distant 18 miles from the town; on the road to the falls, about midway, is situated *Queenstown*, at the foot of the heights. On the right there is an unbroken succession of luxuriant orchards, corn fields, and farm houses.

York.] York is situated on the northern side of the Lake Ontario, about 100 miles from Kingston, and being the seat of government for the

upper province, is a place of considerable importance in the eyes of the inhabitants; to a stranger, however, it presents little more than 100 wooden houses, most of them well built, and one, or perhaps two, of brick.

In noticing the principal cities or towns of Upper Canada, we cannot deny ourselves the pleasure of mentioning *Perth* and *Lanark*. The former, founded by settlers from Perthshire, stands about 40 miles to the north-east of Kingston, upon a tributary stream of the Utawa, named Tay, and is rapidly rising into importance, possessing, according to late accounts, 1000 inhabitants; the latter, founded by settlers from Lanarkshire, situated about 14 miles north by west of the former, is likewise built upon a fine stream, also a tributary of the Utawa, named Clyde.

Lord Selkirk's Colony.] The earl of Selkirk's colony on the Red River, in Upper Canada, is now in a thriving condition. All the settlers are accommodated in houses situated on elevated and healthy spots, further back than they used to be from the river. The fisheries on the Manitoba and Winipeg are an inexhaustible and certain means of supply to the industrious colonists, who, even should their crops fail, are thus in no danger of starving. It would be good for the colony were the buffalo never to come near it: for, hitherto, many of the colonies depending entirely on hunting for a livelihood, suffered severely when the buffalo kept far off in the plains. Tame black cattle now swarm at the colony, butter and cheese are made in abundance, and there are plenty of hogs and poultry.

The Talbot Settlement.] The Talbot settlement lies parallel to the shore of Lake Erie, along two great roads which extend 70 or 80 miles, besides back-settlements.

Canada Company Settlements.] We extract from the *Gore Gazette*—a paper of Upper Canada—the following information, relative to the progress and prospects of the Canada Land company. The tract of land in the Gore district, upon which the company's agents are at present employed, being 42,000 acres of crown reserves for the Six Nations, is now called the township of *Guelph*. The soil is a deep, black, and fertile sandy loam; the timber is beech, maple, elm, ash, and cherry, with some pine, cedar, and hemlock. The surface is gently undulating, enough so to make it pleasing to the eye, without affecting its accessibility to cultivation. From this circumstance, also, the streams flow rapidly, and there are no marshes or pools of water to render it unhealthy to the settler, or to generate those diseases by which the inhabitants of new countries, during the process of clearing and draining, are often afflicted. The river *Speed* meanders through the township from north to south, and discharges itself into the Grand River, at the distance of 7 miles from the border of the said township. Its tributary streams flow into it in various directions, and distribute a plentiful supply of the purest spring water. The proposed town of Guelph, is situated on the river Speed, about 12 miles from its confluence with the Grand River; 5 from Waterloo; 14 from the village of Galt; about 30, by the present circuitous route, from Ancaster, and in a straight line, 25 from Burlington bay, the head of Ship Navigation on Lake Ontario. A road, 8 rods wide, connects the town with the bay.

CHAP. III.—NOVA SCOTIA.

Boundaries and Extent.] THE boundaries of the province of Nova Scotia Proper, or that portion of the continent known under that name, are: the strait of Northumberland, which separates it from Prince Ed-

ward's island on the N.; the gut of Canseau, which divides it from Cape Breton on the N.E.; the Atlantic Ocean on the S. and S.E.; and the bay of Fundy and New Brunswick on the W. It lies within the 43d and 46th parallels of northern latitude; and between the 61st and 67th degrees of western longitude. It is about 300 miles in length, but of unequal width. Its superficies is estimated at 15,617 square miles, or 9,994,880 acres.

Civil Divisions.] The civil departments of the province consist of divisions and counties. Of the former there are five: viz. the *Eastern*, *Middle*, *Western*, *Halifax*, and *Cape Breton* divisions. There are ten counties, which are again subdivided into districts and townships.

Historical Notice.] In the beginning of May, 1497, John Cabot and his son Sebastian, supposing that a shorter route to India might be found in the north-west, sailed from Bristol in a westwardly direction. On the morning of the 24th of June, these intrepid and skilful mariners were surprised by the sight of land. Being the first they had seen on their voyage, they called it *Prima Vista;* and it is generally supposed to have been some part of Nova Scotia; but the Marquis de la Roche was the first European who visited Nova Scotia with an intention to colonize. He sailed from France in 1598, and landed a few convicts on the isle of Sable which is situated about 50 leagues to the S.E. of Cape Breton. In 1603 we find M. De Monts appointed governor-general of all the country from the 40th to the 46th degrees of northern latitude, that is, from Virginia almost to the head of Hudson's bay, by Henry IV. In the commission of De Monts the whole of the country now called Nova Scotia, New Brunswick, and part of the state of Maine, was called *Cadie.* The same territory seems to have successively borne the appellations of *Acadia, L'Acadie,* and *Arcadia.* De Monts found the country thinly inhabited by fierce and savage Indians. The colony planted by this intrepid and enlightened Frenchman was poorly supported by the mother country; and in 1621 James I. of England gratified his secretary, Sir William Alexander, with a grant of the extensive tract of country lying on the E. side of a line drawn in a northern direction from the river St Croix to the gulf of St Lawrence. This country was named in the patent *Nova Scotia,* which circumstance gave rise to a tedious discussion whether *Nova Scotia* and *Acadia* were the names of one and the same country; or indicated two distinct provinces. Charles I. confirmed his father's grant by patent, date 12th July, 1624, and also founded the order of Knights Baronet of Nova Scotia;[1] but in 1632 he resigned to Louis XIII. of

[1] The following particulars regarding this order, are copied verbatim from a periodical publication, dated December, 1775:—"The order of baronets in Scotland was projected by king James the I., for the plantation and cultivation of the province of Nova Scotia, in America, the first settlement made by the Scots beyond the Atlantic. His son, king Charles the I., executed his royal father's plan, and instituted this order soon after his accession to the throne. The first person dignified with this title was Sir Robert Gordon of Gordonstone, a younger son of the earl of Sutherland, the head of one of the most ancient and respectable families in Scotland, whose patent bears date the 28th of May, 1625. Many other gentlemen of the most respectable families were soon after admitted, whose titles by their patents, till the restoration, were uniformly descendible *hæridibus masculis quibuscunque.* Each patent, till Nova Scotia was given up to the French, conveyed a grant of 16,000 acres of land in the province to the patentee, his heirs, and assignees. Several very honourable clauses are inserted in many of these old patents. It has been said, that this dignity was to be obtained by purchase. This was not the case. Some of the patents contain an express exemption from the payment, without fee or reward whatever, on account of procuring this new dignity, and some from the payment of the ordinary fees of the seals, and of extending the patents. By the rules of the institution, king Charles was pleased to grant, for himself and his successors, a right to the eldest sons and heirs apparent of the baronets

France the right which he had claimed to New France, and Nova Scotia, along with Cape Breton and Canada, were immediately taken possession of by the French government. By the 12th article of the treaty concluded between England and France on the 11th of April, 1713, all Nova Scotia, with its ancient boundaries, as also the city of Port Royal, were ceded to Great Britain; but the English did not display the same zeal in the settlement of the country which they had manifested in its conquest: a small garrison, totally insufficient for the purpose, was maintained at Annapolis—as Port Royal was now called—to overawe the Acadians. In 1749, an expedition sailed from England, under the command of colonel Cornwallis, who founded Halifax, and instituted three courts of justice; and, in 1753, a body of German emigrants founded Lunenburg. The early history of these and successive settlements presents little else than a constant succession of struggles with the surrounding savages; but the authority of the government was gradually established, especially under the able administration of governor Lawrence, and emigration began to flow towards the country in a constant and steady stream from the colonies on the American continent, and from the north of Ireland. By the 2d article of a definitive treaty, executed at Paris in 1762, France renounced all claim to Nova Scotia, with Canada, cape Breton, and the islands in the St Lawrence; and since that period Nova Scotia has enjoyed uniform tranquillity and repose. In the beginning of the last war between the United States and Great Britain, the governor of Nova Scotia, Sherbrook, issued a proclamation, recommending to the people under his care to abstain entirely from hostilities against the Americans, whose territory borders upon theirs. He represented to them that the main events of the war could be little affected by their feeble efforts in a corner of the world so remote from the principal scenes of action, and that to make inroads into the country of their neighbours, merely for the sake of plunder or revenge, would be wicked and inhuman in the extreme. By this humane and conciliatory proclamation, he not only gained the esteem and affection of his own people, but excited also the admiration and respect of the Americans. During the whole war not one act of hostility was committed on the border of the two rival countries by either party.

Physical Features.] The face of this country is agreeably diversified by hills and dales; but though undulated in surface, it cannot be described as a mountainous region, for the loftiest hill does not rise more than 600 feet above the level of the sea. The ridges run N. and S., branching off into irregular and hilly land, which terminates sometimes in abrupt cliffs on the coast, and sometimes sinks into gentle declivities in the in-

when arrived at the age of 21 years, to claim the honour of knighthood without fees. His majesty was so desirous of adding every mark of dignity to this his favourite order, that, four years after its institution, he issued a royal warrant, granting them the privilege of wearing a ribbon and medal, which last was presented to each of them by the king himself, according to the words of the warrant. All the privileges of the order, particularly this of wearing the medal, were confirmed, at the king's request, by the convention of estates in the year 1630; and in order to establish them on the most solid foundation, they were again confirmed by an act of the parliament of Scotland, in the year 1633. This mark of distinction fell to the ground, with all the other honours of this country, during the usurpation of the long parliament and of Oliver Cromwell. It continued in general, though not total disuse, after the Restoration. There have been former meetings of the order to revive the use of it, one in the year 1721, and another in 1734. These meetings proved ineffectual, because the proper steps towards its revival were not taken. But last summer, such measures were concerted as have effectually answered the end in view."

terior. The scenery, therefore, cannot be generally described as sublime; but the numerous and beautiful lakes,—the harbours studded with islands, —the profusion of rivers, brooks, and streams, give the whole a cheerful and pleasing appearance. The shores are generally bold and rocky, especially along the southern coast. The most remarkable cliff on the whole coast is the summit of *Aspotageon*, which is about 500 feet in perpendicular height, and is generally the first object seen in approaching Halifax from Europe or the West Indies.

Climate.] The climate of this country seems, with the process of cultivation, to be undergoing amelioration: the winter has been diminished by the prolongation of autumn, and showers of snow are neither so frequent nor heavy as heretofore. Winter, however, is not unfrequently found "lingering in the lap of May," and the spring is consequently late and irregular in its approach. But when vegetation commences, it is very rapid, and in a few days alters the whole face of nature. About the end of May, the fields afford sufficient food for cattle. The heat of summer is generally moderate and regular; it is greatest in August. The autumn is decidedly the finest portion of the year in Nova Scotia; the mornings and evenings in this season are cool, and the sky generally clear and cloudless. This season often continues, though with occasional rains, and a progressive increase of cold, until January, there seldom being any severe weather before the 20th of December. January seldom passes over without a remarkable thaw; February is distinguished for the heaviest falls of snow. The greatest quantity of rain falls in the spring and autumn. Upon the whole the climate of Nova Scotia is salubrious. The air of the forest, notwithstanding the density of the wood, is far from being noxious; while the infinite number of streams, the aromatic effluvia of balsamic trees, the invigorating N.W. wind, and the varied surface of the country, all conspire to render residence here healthy and agreeable. The climate is not remarkable for the generation of any disease peculiar to itself; but in common with other parts of North America, it disposes to acute and inflammatory disorders.

Soil and Agriculture.] In such an extent of territory as is contained in Nova Scotia, there must necessarily be a great variety of soil. Haliburton, estimating by a scale of 12 parts, is of opinion that there may be 3 parts of prime land, 4 of good land, 3 of inferior, and 2 incapable of cultivation. Of these the two latter classes of soil are chiefly to be found on the southern shore, from Cape Canseau to Cape Forchee. The soil may be divided into three classes: upland, interval, and marsh. The quality of every variety of *upland* is known by the species and size of the timber it produces. *Interval* is a term peculiar to America, and denotes that portion of land which is composed of the alluvial deposit of large brooks and rivers. *Marsh* in its natural state, produces a strong coarse aquatic grass; but when enclosed and drained is exceedingly fertile. Wheat is raised with some difficulty in Nova Scotia, being subject to many more casualties than either oats, barley, buckwheat, rye, or Indian corn. On good upland, the average crop of wheat is from 16 to 25 bushels; on interval and dyke it is much more. The climate is so congenial to oats, rye, and barley, that they are raised without difficulty. Oats yield here on an average 25, rye 16, and barley 20 bushels, per acre. Maize, or Indian corn, is extensively cultivated in the western part of Nova Scotia; a large crop of beans may be raised off the same ground at the same time. Potatoes thrive well: their average produce being 200 bushels per acre.

Reaping begins in August, and is finished in September. One of the greatest difficulties experienced in rural affairs in this country, arises out of the rapid progress of vegetation, which limits the time for planting and sowing to a very short space, and, if any irregularity occurs, not only requires great exertion, but occasions these labours to be very imperfectly performed. The cattle are very good; but the most profitable and hardiest stock is sheep. These animals are here exempt from many disorders to which they are subject in Britain. Apples are extensively cultivated; and plumbs, pears, quinces, and cherries, are found in all good orchards.

Population.] In 1749 the population of this colony amounted to 18,000. After the removal of the Acadians, or French settlers, the British settlers were estimated in 1755, at 5,000. In 1781, their numbers amounted to 12,000; but two years afterwards they were joined by 20,000 loyalists from North America; so that, in 1784, the population amounted to 32,000. In 1827 the population of Nova Scotia, exclusive of Cape Breton, amounted to 123,848 souls; of whom 28,659 were returned as belonging to the church of England; 37,225 as Presbyterians; 20,401 as catholics; 9,408 as Methodists; 19,790 as Independents; and 2,968 Lutherans. The majority of the present inhabitants are natives, the descendants of emigrants from Great Britain and the United States. In the eastern parts of the province the majority are Scotch. The descendants of the Acadians are chiefly located at Clare, Pubnico, and Menudie. They speak a very corrupt French patois. A remnant of the Micmac tribe, sometimes called Indians, exists in Cape Breton; and there are above 3000 blacks in the province.

Government.] Nova Scotia is governed by a *lieutenant-governor*, who also takes the title of *commander-in-chief* of the province. He is assisted by a *council* of 12 members, who form a constituent part of the legislature, their consent being necessary to the enacting of laws. In their capacity of legislators they sit as the upper house, distinct from the governor. At present, however, the governor has not only the power of nominating, but of suspending the members of this council. The members of the *House of Assembly* are elected by the freeholders. Halifax chooses 4 county and 2 town-members; all the other counties send 2 each; and each town one representative. The qualification for a vote or representation are either a yearly income of 40*s*. cleared from real estate, or a title in fee-simple to a dwelling-house, or the possession of 100 acres of land.—The governor is chancellor in office, and he and his council constitute a court of error. The supreme court is composed of a chief-justice, 3 assistant-justices, and a circuit associate. There are courts of common pleas in each county, and courts of general sessions. Besides these there are sheriff and justice-of-peace courts.—The revenue of Nova Scotia in 1829 was £38,360, of which £20,000 was expended in making roads and bridges.

Militia.] The number of enrolled militia amounted, in 1829, to 21,897; throughout the last American war it was in a very effective state.

Halifax Division.] The Halifax division comprises only a part of the country of that name, and contains 4 townships: viz. *Halifax*, *Dartmouth*, *Preston*, and *Laurence Town*.—The harbour of *Halifax* is one of the finest in America. A thousand vessels may ride in it in safety. The town itself was founded in 1749, and now contains about 1,000 houses, and 23,000 inhabitants, one-third of whom are Irish. The Province Building, as it is called is the best-built and handsomest edifice in North America.

Dalhousie college was established here in 1820; but has not answered the expectations of its founders.—*Dartmouth* was founded in 1750. It occupies the opposite side of Halifax harbour, and has a population of about 960 souls.

Eastern Division.] The Eastern division contains the districts of *Colchester*, and *Pictou*, and the counties of *Sydney* and *Cumberland*.—The town of *Pictou* was founded in 1790; in 1827 it contained a population of 1,439 souls. It has lately been declared a free port to facilitate its export of coal. There is an academy or college here for the use of all denominations.—The town of *Guysborough* in Sydney is finely situated in a fertile tract of country, and is likewise an excellent fishing station.—*Sherbrook*, on the St Mary river, is accessible by vessels of 50 or 60 tons burden, and possesses many important natural advantages.

Middle Division.] This division contains the three counties of *Hants*, *Lunenburg*, and *Queen's*.—*Windsor* in Hants on the Avon river, which is here about 1,050 feet broad, is pleasantly situated in a beautiful and fertile country. Its chief trade consists in the exportation of gypsum, which exists in great abundance here, forming one continuous ridge through the centre of the extensive peninsula, enclosed by the St Croix and Kenetcook rivers. The King's college here was founded by royal charter in 1802.—*Lunenburg*, next to Halifax, is the oldest settlement formed by the British government in Nova Scotia. It carries on an extensive trade with the West Indies, Newfoundland, and Quebec.—The town of *Liverpool* is built on a harbour of the same name, formerly known by the French appellation of *Rosignol*. It was first settled in the year 1760 by emigrants from Massachusetts. It contains about 150 houses. Its principal article of export is lumber.

Western Division.] This division contains the two counties of *Annapolis* and *Shelburne*.—The town of *Annapolis Royal*, from the earliest settlement of the colony, until the establishment of Halifax, was the capital of the province, and much of the history of Nova Scotia is connected with it. Its trade has declined, but it is still a bustling place.—The inhabitants of *Digby* prosecute the fishing of mackarel with much success.—*Yarmouth* is a thriving town. In 1827 its population amounted to 4,350 souls.—*Pubnico*, a French settlement in the township of Argyle, has an excellent harbour, in which vessels entering the bay of Fundy in distress may find shelter and supplies.—*Cape Sable*, in this division, forms the most southern point of Nova Scotia, being in 43° 27′ N. lat. and 65° 33′ W. long.—*Shelburne* harbour is one of the best in America. The town was founded in 1764, but is in a dilapidated state.

CAPE BRETON.] The island of Cape Breton, formerly denominated by its French masters *L'Isle Royale*, constitutes the most eastern, and at the same time the most northern county of Nova Scotia. In superficial extent it is about equal to one-fifth of the province; and it contains a population of about 25,000 souls. The situation of this island with respect to Canada renders it the key of that province. Any naval power in possession of it will be arbiter of the commerce of Canada, Prince Edward's island, and all the coasts bounding the gulf of St Lawrence. Its greatest length is about 100 miles from N.E. to S.W.; and its extreme width, from S.E. to N.W., is about 80. It is naturally divided into two parts: the southern or lower, much intersected with water,—and the northern or mountainous district. The whole circuit of the coast measures 275 miles, and is broken into bays and harbours in the southern division, but is nearly

continuous, and affords little shelter for shipping, in the northern part. The *Great Bras d'Or's* entrance, on the eastern side of the island facing the shores of Newfoundland, appears to be the point of separation between the two natural divisions, and is the only channel by which the shipping engaged in the timber-trade can be admitted. Its average width is about one mile; and its southern shore is chiefly settled by Scottish emigrants. The rivers flowing into this channel are streams from 60 to 100 feet wide. —The *Little Bras d'Or* is separated from the Great by the island of *Boularderie;* a sunken bar at its mouth forbids the entrance of vessels. It runs in a similar direction to that of the larger channel, and its shores are chiefly inhabited by descendants of the old French colonists.—*Sydney* is a capacious and secure harbour.—*Menadon* is a busy fishing-village.— Round the southern point of *Miré* bay lies the island of *Scatari*, which is usually the first land made by vessels from Europe to any of the colonies eastward of the bay of Fundy.—*Cape Breton* is the most eastern and lowest part of the coast.—From Miré bay to *Louisburg* the shore is rocky and precipitous. The ancient French settlement of Louisburg has been swept completely from its site by the hand of man, although it is not easy to give a reason for its continued desolation. The strait of *Canseau*—so called, it is said, from the Spanish *ganso*, 'a goose,' immense flocks of wild geese having been seen here—is the thoroughfare of all the trade to and from the gulf of St Lawrence, and all the western shores of the Atlantic southward of Cape Breton. It is a noble channel, one mile wide and 20 fathoms deep, taking its course north-westerly from the Atlantic, at Bear island point. The Nova Scotia is the more elevated, but the Cape Breton shore possesses the advantage of an excellent harbour situated about half way from either extremity of the strait. The tide usually runs through this channel at the rate of from 4 to 5 miles an hour. The whole coast is agricultural, and settled 4 miles back into the country by Scottish emigrants.—*Marguerite* lake is a triangular sheet of water 12 miles long, which sends out a river of the same name; the adjacent lands are chiefly possessed by descendants of the French colonists.—*Cape North*, the watch-tower of the gulf of St Lawrence, is a promontory extending into the ocean in a N.E. direction above 4 miles, and forming the most northern point of the island and province.

Climate.] In general character, the climate of this island greatly resembles that of the neighbouring peninsula. From the beginning of November to the end of April nearly all the business of agriculture is necessarily suspended. The mercury has been known to fall during winter to the 32d degree below zero; and few winters pass without a depression to the 20th degree. Nevertheless a partial thaw takes place in the sun's rays almost every day, and often through the course of a winter the face of the country is deluged for several days with thaws. The heat during summer has been observed to reach 96° in the shade; but the weather is called very warm when the thermometer indicates 80°. The blossoms of the indigenous shrubs mostly appear in June; hay is made in July and August; oats ripen in August; and wheat in September. Apples and plums hang on the trees until the approach of frost in the latter end of October.

Commerce.] Fish is the principal article of export from Cape Breton; coals form the next largest article; the timber-trade is yet in its infancy. The agricultural exports—which find a market in Newfoundland—consist principally of live stock, potatoes, oats, butter, cheese, and salted beef and pork. The exports of 1828 were valued at £79,000 prime cost, of which

£55,000 went to the British American provinces. The resources of this island may assuredly be considered as yet very partially developed. The fisheries especially are capable of vast augmentation; it is also difficult to limit the extent to which coal might be wrought here. In the greater part of the grants of land 200 acres are here allowed to each settler; and there yet remains about 500,000 acres of land, fit for cultivation, and unoccupied.

Isle of Sable.] The isle of Sable, the scene of numerous shipwrecks, is above 85 miles distant from Cape Canseau, the nearest part of Nova Scotia. It extends 30 miles in length; but its average breadth is only $1\frac{1}{2}$ mile. It is apprehended that this island is decreasing in size. The reverberated thunder of the sea, when it strikes this attenuated line of sand, on a front of 30 miles, is truly appalling. An establishment has been formed on the island for the purpose of assisting and affording shelter to the crews of such vessels as may be wrecked upon it.

NEW BRUNSWICK.] New Brunswick extends, in one direction, towards the gulf of St Lawrence, and, in the other, to the bay of Fundi. It is bounded by the United States on the W.; and terminates on the S. at the isthmus which leads to Nova Scotia. The prosperity, population, and agriculture of this country, have increased of late years. The river St John is navigable by vessels of 50 tons burden, for nearly 50 miles; and merchandise can be easily transported in boats three times that distance. The effects of the tide are perceptible for a very considerable way up the river. It abounds with salmon, sea-wolves, and sturgeons. Its banks are verdant, rich, and fertilized by annual inundations; they are covered in several places with lofty trees. An easy communication is afforded to the inhabitants of New Brunswick with Quebec, by means of this river. The exports, that consist of timber, fish, and furs, occupied in 1810 not less than 410 ships, of 87,690 tons. The caribou, the moose-deer, the tiger-cat, the bear, and other Canadian animals, have been observed here, although many of them are unknown in Nova Scotia. There are at present more than 150,000 colonists in the territory of New Brunswick; and the indigenous tribe of the *Marechites* is reduced to little more than 100 men. *Fredericktown*, which is situated on the river St John, is the capital of the province. The city of St Ann is nearly opposite to it. There are some other towns of less consequence, not far from the bay of Fundi.

CHAP. IV.—NEWFOUNDLAND AND THE BERMUDA ISLANDS.

NEWFOUNDLAND is situated between 45° 50′ and 51° 30′ N. lat. and 53° 30′ and 58° 20′ W. long. It is 381 miles in length, and from 40 to 287 in breadth, of a triangular form, and 900 miles in circumference. The strait of Belleisle separates it on the N. from the shores of Labrador; on the W. it has the gulf of St. Lawrence; and on the E. and S. the Atlantic ocean. The coasts are high; and the shores bold and indented. Concerning the inland country little is known. The inland mountains are generally of a pyramidal appearance; and seem not to lie in the form of ridges. The country, where it has been examined, presents numerous morasses and ponds, with a considerable number of what, in America, are called dry barrens. Several streams descend from the mountains, but they are not navigable. It does not appear that cultivation has been carefully attempted; but the soil and climate are unfriendly to the growth of useful plants. Yet, though the soil of Newfoundland appears to have received

from nature but few advantages, the sea round its shores contains a treasure that is inexhaustible. The cod-fishery here carried on is the richest in the world, and gives employment to many thousands, and food to many millions.

Cod-fishery.] The fishery is on the banks, at different distances from the island. The chief is that called the *Great bank*, which, according to some accounts, lies between 41° and 49° N. lat., and it is in length 300 miles, and in breadth 75 miles, but others assign to it a length of more than 400 miles, and a breadth of about 140. It has from 22 to 50 fathoms water. *False bank* lies to the E. of the Great bank. *Vert*, or *Green bank*, is not much inferior to the Great bank in dimensions, being 240 miles long and 120 wide; and *Banquero* is not much less. Besides these, there are many other shoals, abounding with fish, of which the chief are the bank of *St Peter's*, *Whale bank*, and the shoals of *Sand island*. Cod-fish abound in every part of the ocean round Newfoundland, but upon the banks and shoals they are, at certain seasons, particularly plentiful. The fishery near the shore commences more early, and continues longer, than that upon the banks, but is not nearly so productive. The shore-fishery begins about the 20th of April; the fishery upon the bank on the 10th of May. The former continues till the 10th of October; while the latter concludes about the end of September. Different baits are used at different periods of the season. The first is a piece of pork or a bird. The cod, when caught, furnishes bait to continue the fishing, the shell-fish called clams, which are found in the belly of the cod, being excellent for that purpose. To the clam succeeds the lobster; and to the lobster, the herring and launce,—which, in June, are succeeded by the *capelan*, a fish which then makes its appearance upon the coast. The capelan is, in August, displaced by the *squid;* which, in the last place again makes way for the herring. The cod is not taken with a net but with hooks, and only during daylight. An expert fisher will take from 150 to upwards of 300 in a day. A single fisher has in one season caught 12,000 fish; but the average number is reckoned to be 7000. Pennant informs us, that the largest fish known to be taken, was in length 4 feet 3 inches, and weighed 46 pounds. A splitter who has acquired dexterity, will, in an hour, split 300 quintals of fish; but the common quantity is 200 quintals. When the fish has been dried, and laid in heaps, a heap 20 feet in length by 10 in breadth, is supposed to contain 300 quintals; and if it be permitted to lie two days, it decreases in bulk about one-twelfth. The fish caught are not all of an equally good quality; those caught at the beginning of the season are reckoned the best. The best method of curing is by drying them, and this way is most generally practised; but, in some cases, they are salted in bulk in the hold, and are thus carried to market. Some ships, instead of stopping to fish, proceed directly to the island, where they purchase a cargo from the inhabitants; but by far the greater number catch and cure a cargo for themselves. The former are called *sack-ships*, the latter *fishing-ships*. The fish are sold in every part of the world, but the principal markets are the West Indies, Spain, Portugal, and Italy. The shipping belonging to this colony, employed in the fishery, amounted in 1812, to 495 vessels, admeasuring 61,543 tons, navigated by 4,950 seamen; besides 2000 fish-shallops, measuring about 20,000 tons, manned by 6000 men. The estimated value of its exports, in the same year, amounted to £705,594.

Population, &c.] The population of Newfoundland has rapidly in-

creased during the late war. The number of permanent inhabitants in 1816, according to official statement, was 70,000, principally Irish. The inhabitants of Newfoundland are divided into a great variety of religious sects. Religious instruction is conveyed to them by clergymen of the church of England, numerous missionaries from the Methodist society, a Roman catholic bishop and clergy, and by ministers of the presbyterian religion. Besides the above, several thousand persons winter here, for the purpose of building and repairing small vessels, and erecting scaffolds for drying fish. The stationary inhabitants are under the management of two lieutenant-governors, of whom one resides at St John's, the other at Placentia. A governor—who is generally a sea-officer of high rank—sails and returns with the annual fleets. This officer commands the squadron of ships of war which is yearly sent out to protect the fishery. The town of *St John's* is situated on the S.E., *Placentia* in the S., and *Bonavista* on the E. part of the coast.

History.] The voyage in which Cabot discovered Newfoundland has been already mentioned. The land was considered as being of very little value, but the fishery upon the neighbouring banks soon convinced the British that the possession of it was a matter of some consequence. The French, too, knew the value of the fishery as well as the British, and many disputes arose concerning the property of Newfoundland. At the peace of Utrecht, the possession of the island was confirmed to the English, but the French were allowed to dry their nets upon the northern shores. In 1763, their privilege of fishing was extended to the gulf of St Lawrence, provided they should never approach within less than three leagues of the shores of British America. At the same time they obtained possession of *St Pierre* and *Miquelon*, two small islands to the N. of Newfoundland; but were prohibited from erecting fortifications, and from keeping upon them more than 50 soldiers. These privileges were continued to them by the treaty of 1814.

PRINCE EDWARD'S ISLAND.] *St John's Isle*, now called Prince Edward's island, is about 70 miles in length, by 28 in breadth, and contains 1,363,400 acres. It abounds in timber, and was called by the French the storehouse of Canada, because it formerly supplied that country with grain and cattle. Its capital is *Charlotte's town*, where a lieutenant-governer resides. The total population is about 6000 souls.

ANTICOSTI.] The island of Anticosti, called *Assumption* by Cartier, who discovered it in 1534, is situated in the mouth of the St Lawrence river. It is 90 miles long and 20 broad, but offers no convenient harbour, nor any remarkable object.

THE BERMUDA ISLANDS.] We cannot give more properly an account of the Bermuda Islands than in this place. This group, situated half-way between Nova Scotia and the Antilles, belongs to the former government, and serves as a summer-station for some of the ships that winter at Halifax. The archipelago is about 35 miles in length, and 22 broad, but there is a long and dangerous ridge of rocks near it. The size of the islands varies considerably; the least is not more than 200 or 300 paces long, the largest is about 12 miles. From a distance they have the appearance of sterile hills, at the bases of which the ocean is dashed into white foam. The water in these islands is brackish, with the exception of that which falls from the clouds; it is kept in large cisterns, in order to supply the inhabitants, and not unfrequently some ships of war. The air is considered pure and wholesome. The cedar-trees that grow in these islands consti-

tute almost the sole riches of the settlers, who form them into large skiffs, which are used in coasting between the United States, Acadia, and the Antilles. The fortune of an individual is computed by the number of his trees, each of which is worth about a guinea a foot. Agriculture is neglected, on account of the plantations occupying the greater part of the rich lands. The Americans supply the inhabitants with grain and different sorts of provision. The population may be estimated at 10,000 souls; in this number there are about 4,794 black slaves, over an extent of 12,161 acres. The city of *St George*, in the island of the same name, contains 250 houses. *Hamilton* is at present an inconsiderable town. The frequent hurricanes to which they are exposed, have obliged the settlers to build low houses. English laws are in force, and the legislative power is vested in a general council. The Spaniards have regretted the loss of these islands, on account of the convenience of their harbours. They were discovered, according to the common opinion, in 1557, by Juan Bermudas, but it is probable that they were known in 1515 under the double name of Bermuda and la Garca.

UNITED STATES

OF

NORTH AMERICA.

Preliminary Remarks.] Previous to the purchase of Louisiana by the government of the United States of North America, from Napoleon Bonaparte, it was a difficult matter accurately to determine the line of demarcation between the British possessions in North America, and those of the United States, in the north-western quarter. As far as the N.W. extremity of the lake of the Woods, in 49° 37′ N. lat. and 94° 31′ W. long., the boundary was pretty clearly defined; but beyond this limit—owing to the geographical ignorance of both parties, at the period of the peace of 1783—it became a matter of uncertainty how, or where to fix it. As both parties believed the source of the Mississippi to be in the same parallel of latitude with the N.W. extremity of the lake of the Woods, and at least 6 degrees of longitude to the W. of that position, the line of boundary was made to run from the N.W. extremity of the above lake, in a line due W., till it should strike the above supposed source of the Mississippi; and thence to run in a S.E. direction down the middle of that stream, as far as the 31st degree of latitude. But as the head of the Mississippi has been found, by the successive observations of Mr Thomson, astronomer to the North-west company, and captain Pike, who, in 1806, by orders of the American government, ascended the river to its source, to lie in 47° 42′ N. lat. and 95° 8′ W. long., or only 37′ W. and 1° 55′ to the S. of the N.W. extremity of the lake of the Woods, a difference of opinion has of course arisen between the North-west company and the American government, respecting the boundary. Messrs Thomson and Mackenzie are of opinion that the boundary should run from the N.W. end of the above lake in a S.W. direction, till it touch the source of the Mississippi; and it is to be remarked, that the charter of the Hudson's bay company extends to all the waters that fall into Hudson's bay, and therefore must include the Moose, Assiniboin, and Red river, which disembogue themselves into Lake Winnipeg, and which are again conveyed to Hudson's bay by the rivers Severn and Nelson. If the letter of the Hudson's bay company's charter were to be strictly adhered to by both parties, it would carry the boundary line for a certain distance W. of the source of the head of the Mississippi, as far S. as the parallel of 46°, or more than 100 geographical miles to the S. of the source of that river; comprehending an extensive tract of well-wooded and fertile territory, watered by the Red river and its numerous branches, with the Moose river that rises within a mile of the northern bank of the Missouri river. Mr Mackenzie further observes, that if the boundary, instead of following the course of the small lakes from the N.W. end of Lake Superior, as far as the N.W. extremity

of the lake of the Woods, were to follow the principal rivers to their source, it ought to keep through Lake Superior to the river St Louis, which may be regarded as the parent-stream of the St Lawrence, and ascend that stream to its source, close to which is the source of the waters falling into Lake Rainy,—which is a common route of the Indians to the lake of the Woods. The source of the St Louis is but a very short distance from the source of Meadow river, one of the head-waters of the Mississippi, and where it is navigable for canoes. He is further of opinion, that the line of boundary should be continued thence in a S.W. and then in a western direction, till it strikes the Pacific ocean to the S. of the Columbia river, in lat. 46°. It is to be observed, however, that if Mr Mackenzie's opinion were to be adopted, it would not only include all the waters that fall into Lake Winnipeg from the S. and the S.W. as the Red, Assiniboin, and Saskatchewine rivers, but also the whole of the Upper Missouri, with its northern and several of its southern branches, and also the entire course of the Columbia, which would deprive the Americans of all intercourse with the W. coast of America, and to which we may be very certain the American government would never submit. Besides, the treaty of 1783 and that of December, 1814, carry the boundary as far to the N.W. as 49° 37′ N. lat. and 94° 31′ W. long. expressly, and at the very utmost, the charter of the Hudson's bay company, however it may include all the waters that fall into Hudson's bay, cannot with any colour of justice be construed to comprehend the Missouri, with its concomitant streams, as none of these fall into Hudson's bay, and therefore cannot be included in the charter. Some of the northern branches of the Missouri extend as far N. as 50° and upwards of N. lat., and the Missouri itself bends to the N.E. as far as 48° 20′ N. lat. The Americans, on the other hand, maintain that if the pretensions of the North-west company were to be admitted, agreeably to Mr Thomson's idea, in making the line of boundary run from the N.W. extremity of the lake of the Woods, almost due S. instead of due W., till it touch the source of the Mississippi, it would deprive them not only of the upper course of the Red river, but of nearly two-fifths of Louisiana; whereas, if the line, agreeably to the treaty of 1783, is run due W. from the lake of the Woods, it will strike the Red river nearly at its junction with the Assiniboin river, thence crossing that river, and running in a continuous line due W. it will cross the Columbia, and then strike the western coast, at Birch bay, in Queen Charlotte's sound, in 49° N. lat., or nearly 3 degrees N. of the mouth of the Columbia. It is surprising that the boundaries beyond the N.W. extremity of the lake of the Woods, have not been settled at all, notwithstanding that the country has been explored as far W. as the Pacific, both by British and Americans. Ignorance of the interior of North America can now no longer be pretended as an excuse for allowing this boundary to remain undefined, and to leave it solely to the American government and the Hudson's bay company to settle it between themselves. The powers of the commissioners on both sides, according to the provisions of the treaty of 1814, were limited entirely to adjust with precision what is the middle of the river St Lawrence, and of the lakes and water communications, as far as the lake of the Woods, which they have accordingly done; but beyond this their powers do not extend. Delays in settling the boundary westward, will, by gradually unfolding the value of the country, only increase the difficulty of fixing the limits, and afford subject matter of future and serious disputes between both countries. The Americans are an en-

terprising and ambitious people; the tide of their population is rolling rapidly westward; and the territory in dispute may be peopled with American settlers, at no very distant period, and occupation ensure possession.

Since the United States obtained possession of Louisiana, the boundaries on that side were, till 1821—when they were settled by a convention between the two powers—matter of dispute between them and the Spanish Americans. The former claimed all the country south-westward, as far as the mouth of the Rio del Norte, as part of Louisiana. They alleged that all that region called by the Mexicans the province of Texas, anciently belonged to Louisiana; and therefore America ought to possess in full right, all Louisiana, as it was possessed by France, before its cession to Spain. But the slightest inspection of the maps of Humboldt and Pike, will show that the bay of St Bernard is at least 200 miles N. of the mouth of the Rio del Norte; and besides, the Mexicans show that the Spanish population of Texas is of a much older date, having been brought, in the early stages of the conquest, from the interior of Mexico, or New Spain. But by the convention mentioned above, the Americans, in return for the cession of the Floridas, have abandoned all claim to the territory S.W. of the Sabine river, which on that side is now the settled boundary of Louisiana.

Boundaries.] The United States are bounded by the Atlantic ocean, the bay of Fundy, and the province of New Brunswick, on the E.; by Lower and Upper Canada on the N.W., N., and N.E.; by the territory belonging to the Hudson's Bay company, and the N.W. Company, on the N.; by the Rocky mountains, on the W.; by New Mexico, on the S.W.; and by the province of Texas, the gulf of Mexico, and Spanish Florida, on the S. The boundary line between the British possessions commences in 45° N. lat., and 67° W. long., at the mouth of the river St Croix, in the bay of Passamaquoddy; runs up that stream to its source; thence, in a N.N.W. direction, crossing the upper part of St John's, till it arrives at the Highlands, in 48° N. lat., which separate the streams that fall into the St Lawrence from those that empty themselves into the Atlantic; thence, in a S.W. direction, along said Highlands, till it reaches the north-western source of the Connecticut; thence down the middle of that stream, till it strike the 45° of N. lat.; thence due west to the river Iroquois, or Cataraqui (St Lawrence); thence through the middle of that river into lake Ontario; through the middle of said lake, until it strikes the water communication between it and Lake Erie, and through the middle of said lake, until it arrives at the water communications between it and Lake Huron; thence, through the middle of said lake, to the water communication between it and Lake Superior; thence, through Lake Superior, northward of the isles Royal and Philippeaux, till it arrives at its north-western extremity; thence, through a chain of small lakes, (erroneously denominated the Long Lake,) portages, and other small lakes, till it arrives at the lake of the Woods, called by the Indians Minitti, and by the French, its former possessors, Lac du Bois; thence, to its north-western extremity, at Portage du Rat, in N. lat. 49° 37′, and 94° 31′ W. long.; thence the boundary turns S. to 49° N. lat., and thence due W. till it strikes the Red river, a little above its junction with the Assiniboin, or Stone river; thence, it runs in a N.W. direction, till it reaches the high level that separates the streams that fall into the Saskatchewine, from the south, from those that empty themselves into the Missouri, from the north,

in lat. 50°, and upwards; thence, in a S.W. direction, till it arrives at the sources of Maria and Medicine rivers, in lat. 49°, and long. 113°; thence the boundary turns to the south-east, along the crest of the Rocky mountains, till it strikes the Platte river in 42° N. lat. at its source; thence to the source of the Arkansaw river, down that river to the 100° W. long.; thence due S. to a point on the Red river in the same meridian; and from thence to the source of the Sabine in a S.E. direction, and down that stream to its mouth in 93° 57′ W. long., and 3° 48′ W. of New Orleans in the gulf of Mexico.

Extent.] The greatest longitudinal extent of territory possessed by the United States, is 46 degrees from E. to W.: namely, from East Port, in the province of Maine, at the mouth of St Croix river, to the crest of the Rocky mountains. Averaging 49 British miles for every degree of longitude in the latitude of 45°, the whole will form an aggregate of 2250 British miles, in a straight line. If the length be taken from Cape Cod, in 42° N. lat., and 70° W. long., to the ridge of the Rocky mountains that separates the remotest sources of the Rio del Norte, from those of the Arkansaw, Platte, and Big Horn rivers, in the same latitude, and 112° W. long., the distance will be 2160 British miles. If taken from the mouth of Albemarle sound, in 36° N. lat., and 76° W. long., to the crest of the Sierra Obscura, to the E. of Santa Fé, in W. long. 104° 30′, the length will amount to 1436 British miles. If taken from the mouth of St Mary's river, the southern limit of the United States on the coast of the Atlantic, in 30° 45′ N. lat., and 81° 30′ W. long., to a point on the Sabine river in the same latitude, and 94° W. long., the direct length will be 12½ degrees, which, in the parallel of 36°,[7] will give 745 British miles.

[7] In the estimation of the length in the parallel of 36° we have, upon the authority of Humboldt, gone upon the assumption that the dividing ridge, on the east of Santa Fé, is in 104° of W. long.; and that the town of Santa Fé, lies in 36° 12′ N. lat., and 104° 48′ W. long., or in 104° 37′, according to Antillon and Bauza. But the fact is, that geographers are by no means agreed as to the latitude or longitude of Santa Fé, and of consequence also, as to the longitude of the great dividing ridge in this quarter. Humboldt charges the American geographers with gross inaccuracy in their longitudes, especially in the map of West Louisiana, published at Philadelphia in 1803, which extends Louisiana in this quarter 5 degrees too far west, and places the city of Santa Fé in 110° 5′ W. long.; and Cape Mendocino, on the western coast of America, 4 degrees too far west, notwithstanding the observations of Vancouver and the Spaniards. If the American longitude of Santa Fé were correct, it would extend the boundary of Louisiana 280 British miles farther W. than we have done. Pike gives us little assistance in this matter, as it does not appear that he ascertained a single degree of longitude upon the spot. In his description of New Mexico, indeed, he places Santa Fé in 109° W. long., but whether from Paris or London, his text does not inform us. If from Paris, then it will be 1° 47′ to the W. of the position assigned by Humboldt, and 3° 30′ farther E. than in the map of West Louisiana mentioned above. If from Greenwich, its position will be 4° 12′ farther W. than that indicated by Humboldt, and 1° 5′ to the E. of its position as stated in the American map. On the other hand, Humboldt was never in New Mexico, and his longitude and latitude of Santa Fé are given solely on Spanish authorities; and it does not appear that any of these authorities had been upon the spot, or verified their statements by actual astronomical observations at Santa Fé itself. He of course confesses that its longitude and latitude are still doubtful, and accordingly it stands, in his list, among those places whose geographical site is not accurately fixed. If we were to hazard an opinion, it would be this, that the subject is involved in obscurity for political reasons; and that if the Americans extend the longitude of Louisiana, in this quarter, 5 degrees too far to the W., the Spaniards are equally desirous of extending the frontier of New Mexico too far to the east. As to the latitude of Santa Fé, geographers are no less disagreed. It is placed in 38° 10′ by Jefferson, in his notes on Virginia; by Playfair, in 37° 30′; by another authority, in 36° 50′; by Rivera, in 36° 28′; by Humboldt, in 36° 12′; by Laforey, in 36° 10′; and by Pike, in his usual vague manner, in 36°. All these circumstances taken together, evidently show, that neither the position of Santa Fé, nor the direction of the great dividing ridge, nor the western frontier of Louisiana in this quarter, are well known. In stating the extent of the United States from east to west, we have been obliged to discuss the position of Santa Fé, as upon it the extent of Louisiana depends. While

Between the mouth of the Sabine river, and the most eastern mouth of the Mississippi, denominated the Balize, is 300 British miles, which is the narrowest part of the United States' territory in a longitudinal direction.

With respect to the extent of the American territory from N. to S., it varies greatly. Along the Atlantic coast, the territory extends 1300 British miles, from the mouth of the river St Croix, in the N.E., to the mouth of St Mary's river in the S.W. From the St Lawrence river, and the frontiers of Lower Canada, in 45° N. lat., to the frontiers of Spanish Florida, in 31° N. lat., is 14 degrees of latitudinal breadth, or 970¼ British miles. But this breadth is considerably contracted by the deep bend which lakes Erie and Ontario make to the S.W., being gradually contracted from 970 to 750 British miles, which is the whole intercepted space between the most southern point of Lake Erie, and the north boundary of Spanish Florida. As we approach the Mississippi, the breadth expands from 10⅓ degrees, to 17 degrees of latitude, or from the gulf of Mexico, in 29°, to the southern shores of Lake Superior, in 46° N. lat. But if a line be drawn from the Rat Portage, at the N.W. end of the lake of the Woods, in 49° 37′ N. lat., and 94° 31′ W. long., to the mouth of the Sabine, in 29° 50′ N. lat., and 94° W. long., it will occupy a space of almost 20 degrees, or 1,370 British miles. As we advance still farther west, the breadth gradually contracts, till we arrive at the base of the great western range, denominated the Rocky mountains, where it is confined to the space of 8 degrees, or little more than 550 British miles.

Superficial Measure.] The territory of the United States may be considered as comprehending two great divisions—the eastern and the western; the Mississippi, through its whole course, constituting the line of separation. The first division, up to the acquisition of the second, constituted the whole territory of the United States, and was computed by Mr Hutchins—the old geographer of the Congress—to contain 1,000,000 of British square miles, or 640,000,000 of acres of land and water; which last he computed to contain 51,000,000 of acres, or 79,698¼ square miles.[8] After deducting the waters, there remained 589,000,000 of acres of land, or 920,201¼ British square miles. In this computation, however, Hutchins committed two material errors: the first consisted in taking it for granted that the lakes of Canada were accurately delineated in existing maps—for with all the improvements of modern geography, and with all the additional information lately furnished, respecting the interior of North America, it is not even certain that the great dividing lakes, with the smaller ones to the W and N.W., are yet accurately laid down in maps, so as to authorize us to calculate precisely the quantity of square miles and acres, belonging to each, or all of them, all our information respecting the latter, being derived solely from the reports and excursions of the Canadian hunters. The second material error lay in his longitudes, for he extended the territory of the United States too far to the W. by laying down the course of the

upon this subject we may remark, that though on the one hand we ought to be cautious in receiving such longitudes and latitudes as Humboldt obtained at second hand from Spaniards, and which he could not verify by personal observation, we are sorry to remark, on the other hand, that in books of geography and travels published in the United States, even of those undertaken by order of their government, we meet with few or no observations of longitude. They are indicated on their maps, indeed, but we are seldom told how, or where they took them.

[8] In this computation were included the waters of the lake of the Woods, lake Rainy, Red Lake, lakes Superior, Erie, Huron, with the bay of Puans, lakes Michigan, Ontario, Champlain, St Clair, St George, and all the bays and inlets on the coast, with the spaces occupied by the rivers.

Mississippi, the grand inland boundary, several degrees farther W. and N.W. than the truth, as far down as its confluence with the Ohio. By these two material errors, he made the superficial extent of the United States, E. of the Mississippi, 100,000 British square miles, or 64,000,000 of acres too much.—According to Humboldt, the superficies of the United States, independent of Louisiana, did not exceed 900,000 square miles, or 117,478 square leagues of 25 leagues to the degree. This was the estimate of Mr Albert Gallatin, the American treasurer at Washington, who furnished Mr Humboldt with it in 1804, and who believed that any error of his calculation could not exceed 50,000 square miles.—Beaujour, in his statistical tables appended to his sketch of the United States, estimated the superficies of the United States, without Louisiana, at 908,364 square miles. But as he followed the error of Hutchins, in allowing 347,000 square miles of unoccupied territory, lying along the eastern bank of the Mississippi from its confluence with the Ohio to its supposed source, 100,490 miles must be deducted, which would leave 807,874 square miles of territory, exclusive of the lakes, bays, and rivers, to the United States; to which, if 79,698 square miles were added, for the lakes, &c. it would make a total of 887,572 square miles, or 12,428 square miles less than Humboldt and Gallatin's estimate.—The latest estimate is that of Mr John Melish, who in his geographical description of the United States, published at Philadelphia in 1815, calculates the total superficies of the United States, independent of Louisiana and the lakes, at 861,856 square miles. In this calculation, however, is included the territory on the E. of the Mississippi, commencing at its confluence with the Red river, in lat. 31°, and W. long. 91° 33′, and extending thence as far E. as 87° 40′, and south to the sea, comprehending a superficies of 17,000 square miles, which if deducted from Melish's estimate, will make the total superficies of territory 843,856 square miles, which does not materially differ from Humboldt and Gallatin, who included the lakes, bays, and rivers, in their calculation. His table appears, upon inspection, to approximate nearest to truth, and bears evident marks of attention and labour. We shall accordingly here present the reader with Mr Melish's statistical table of the different states in the eastern division, their square miles, and number of acres:—

States.	Square Miles.	Acres.	States.	Square Miles.	Acres.
1. Maine, ...	34,000	21,760,000	14. Kentucky, . .	40,110	25,670,000
2. Massachussets,	8,765	5,609,600	15. Tennessee, . .	43,200	27,618,000
3. N. Hampshire, .	9,491	6,074,240	16. South Carolina,	33,880	21,683,200
4. Vermont, . . .	10,237	6,551,680	17. North Carolina, .	50,500	32,300,000
5. Rhode Island, .	1,548	990,720	18. Georgia, . . .	60,000	38,400,000
6. Connecticut, .	4,400	2,816,000	19. Mississippi, . .	93,480	59,827,000
7. New York, . .	52,125	33,360,000	20. Indiana, . . .	39,000	24,960,000
8. New Jersey, .	7,920	5,068,800	21. Illinois, ...	52,000	33,280,000
9. Pennsylvania, .	49,390	31,609,600	22. Michigan, . .	34,820	22,284,000
10. Delaware, . .	2,250	1,408,000	23. N. W. Territory,	106,830	68,371,200
11. Maryland, . . .	14,000	8,960,000	24. Columbia, . .	100	64,000
12. Virginia, . . .	70,500	45,120,000			
13. Ohio, ...	43,860	28,070,400	24	861,856	551,587,840

This estimate of Mr Melish is 37,412,160 acres, or 58,456½ square miles less than that of Mr Hutchins, even including the territory E. of the Mississippi, and S. of the 31st degree of latitude, amounting to 17,000 square miles, or 10,880,000 acres, which will make the total difference between the two estimates amount to 48,592,160 acres, or 75,456½ square miles. We shall presently introduce a more recent estimate of the area of this part of the States' territory.

As to the territory W. of the Mississippi, or second great division, it is much more extensive than the eastern, comprehending, according to Beaujour's statistical table, 1,094,000 square miles; and according to Humboldt, 104,100 square leagues of 25 to the degree, or 800,000 British square miles.[a] According to Mellish's table, where its boundaries and extent are delineated with tolerable accuracy, its superficies amounts to 1,026,250 square miles, or 656,665,000 acres, exceeding the superficies of the eastern division by 165,394 square miles, or 105,617,160 acres; and in all this vast expanse of territory, only two small lakes, among the Rocky mountains, are to be found. The superficies of Louisiana was estimated at 450,000 square miles only; but this arose from ignorance of the vast space traversed by the Missouri, since disclosed to view by the recent voyages and travels of captains Lewis and Clarke, across the continent of central America, to the Pacific ocean. This western division is subdivided into two: namely, Upper and Lower Louisiana; the former containing 985,250 square miles, and the latter 41,000.

The total superficies of the United States, then, including Louisiana and the lakes is, according to Humboldt, 1,700,000 square miles; according to Beaujour, excluding the lakes, 2,000,000; and according to Mellish, 1,888,106 square miles, exclusive of the lakes. But from the following table, showing the extent, population, and representation of each State, and the proportion of the inhabitants respectively engaged in agriculture, manufactures, and commerce, made up from official returns received in 1820, it appears that the superficial area of the United States amounted at that period to 2,364,400 square miles. But in this estimate, the two Floridas, and the territory watered by the Columbia and its numerous branches, are included, W. of the rocky mountains—countries not at all included in the fore-mentioned estimates of Hutchins, Humboldt, Beaujour, Gallatin, and Melish. If these be deducted from the sum total of territorial surface assumed in the statement, and amounting, according to it, to 345,750 B. square miles, then the sum total of territorial surface, exclusive of the Floridas and Columbia, will amount to 2,018,650 B. square miles, which is only 12,000 B. square miles more than Beaujour's estimate, and 112,000 B. square miles more than that of Melish. But in this latter estimate of Melish, the surface of the great Canadian lakes was not included; and the territorial surface of the country W. of the Mississippi is given at 75,000 B. square miles more than in the estimate of Melish. So that taking these into account the difference will not be so very great as it appears at first sight. According to this political statement of 1820, the territory of the United States is composed of three grand divisions: the old territory E. of the Mississippi, and including the Floridas,—the lately acquired territory W of the Mississippi, or Louisiana,—and the territory W. of the Rocky mountains watered by the Columbia. The square of each surface is the following: 1st division or eastern territory, including the Floridas, 965,100 B. square miles; 2d division, W. of the Mississippi, 1,111,300 B. square miles; 3d division, W. of the rocky mountains, 288,000 B. square miles: total, 2,364,400 B. square miles. If the states of New Orleans and the Floridas, included in the above table, be deducted from the eastern division, the square superficies of that division will be 859,350 B. square miles, or only 2,506 B. square miles less than the statement of

[a] The data on which Humboldt's estimate is founded are not told us; and at the time when he wrote his description of New Spain, he was comparatively ignorant of the boundaries and extent of Louisiana.

Mr Melish made in 1815, the surface of these states amounting to 105,750 B. square miles, as given in the table of 1820,—a very near approximation. Thus we have given as accurately as our materials would admit, the calculated extent of territorial surface belonging to and claimed by the United States. The reader is not to suppose that any or all of the statements given above are rigidly accurate or mathematically correct; for such cannot be given, or reasonably expected, till the whole has been geometrically surveyed, but only approximations to the real quantity of territorial space comprehended within the political limits of the United States.[3]

States and Territories.	Sq. Miles.	Population.	Agriculture.	Manufactures.	Commerce.	Population in each sq. mile.
STATES.						
Maine . .	32,000	298,335	55,041	7,643	4,297	$9\frac{1}{3}$
New Hampshire .	9,280	244,161	52.384	8,699	1,068	26
Vermont . .	10,200	235,764	50,951	8,484	776	23
Massachusetts .	7,800	523,287	63,460	33,466	13,301	67
Rhode Island .	1,360	83,059	12,559	6,091	1,162	61
Connecticut .	4,670	275,248	50,518	17,541	3,581	59
New York . .	46,200	1,372 812	247,648	60,038	9,113	30
New Jersey . .	6,900	277,575	40,811	15,941	1,830	40
Pennsylvania .	43,950	1,049,458	140,801	60,215	7,083	24
Delaware . .	2,060	72,749	13,259	2,821	533	35
Maryland .	10,800	407,350	79,135	18,640	4,771	38
Virginia . .	64,000	1,065,366	276,422	32,336	4,509	17
North Carolina .	43,800	638,829	174,196	11,844	2,551	15
South Carolina . .	30,080	502,741	166,707	6,747	2,684	17
Georgia . .	58,200	340,989	101,185	3,557	2,139	6
Alabama . .	50,800	127,901	30,642	1,412	452	$2\frac{1}{2}$
Mississippi .	45,350	75,448	22,033	650	294	$1\frac{2}{3}$
Louisiana . .	48,000	153,407	53,941	6,041	6,251	3
Tennessee .	41,300	422,813	101,919	7,860	882	10
Kentucky . .	39,000	564,317	132,161	11,779	1,617	14
Ohio . .	38,500	581,434	110,991	18,956	1,495	15
Indiana .	36,250	147,178	61,315	3.229	429	4
Illinois . .	59,000	55,211	12,395	1,007	233	1
Missouri . .	60,300	66,586	14,247	1,952	495	1
TERRITORIES.						
Michigan .	33,750	8,896	1,468	196	392	$\frac{1}{4}$
Arkansas . .	121,000	14,273	3,613	179	79	$\frac{1}{8}$
Florida . .	57,750					$\frac{1}{6}$
North-West Territory .	144,000					
Missouri Territory	930,000					
Columbia Territory .	288,000					
District of Columbia	100	33,039	853	2,184	412	
Totals .	2,364,400	9,638,226	2,170,616	349,506	72.193	330

[3] It is stated that, since the year 1824, no fewer than 21,421,985 acres of land have been ceded by the Indians to the United States. The Public, or, as we should call them, the Crown lands of the United States, consist almost wholly of territory wrested from the Indians: at least 7-8ths of it come under this description. Up to 1826 the quantity of land purchased was officially reported as amounting to 261,695,427 acres, of which 7,707,085 had been appropriated to the endowment of schools and colleges, and 40,396,382 had been sold for L.10,088,720, or at the rate of a minute fraction less than 5s. per acre. The number of acres acquired from the Indians in the states of Ohio, Indiana, Illinois, Louisiana, Alabama, Mississippi, Missouri, and the Michigan and Arkansas territory, and included in the foregoing return, was 209,219,865; and the permanent and limited annuities payable to them amount to L.44,890. If this be the total purchase money of the lands, they have cost the United States somewhere about 4s. 3d. a year for each thousand acres! but it would be, in fact, much less, as there are L.15,300 of limited annuities.

CHAP. I.—HISTORY.

We have already related the discovery of the Western hemisphere by Columbus in 1492, and adverted to the discoveries of succeeding navigators in this quarter. We shall introduce our historical sketch of the United States, with a brief account of their first settlement. In 1497 the coast of *Virginia* was discovered by Cabot, while in the service of Henry VII. No attempt, however, was made to settle a colony here till the end of the reign of Elizabeth, who, in 1584, granted a patent to Sir Walter Raleigh to colonize all such countries in this quarter as were not inhabited by Christians. While this patent was preparing, Sir Walter, with the assistance of several of his friends, fitted out two ships to proceed in the discovery of this country. The description of the country given by these adventurers, on their return from their first voyage, was such as induced Raleigh and his friends to equip a second expedition. Seven ships departed from Plymouth, in 1585, and sailed to the island of Roanoake in the mouth of Albemarle river, where they left captain Lane, with 108 men, to colonize the country, and to make a more complete discovery of it. The Indians, however, soon became jealous of these neighbours, and used several stratagems to destroy them, which so embarrassed the settlers, that they returned to England with admiral Drake who had accidentally touched upon the coast. Not disheartened by the fate of this attempt, Raleigh despatched another colony, consisting of 150 men. They sailed from Plymouth in three ships, and arrived on the American coast in 1587. After some time, they found themselves in want of almost every necessary, and governor White, to whom Raleigh had committed the management of the colony, embarked for England in order to procure supplies. His mission occupied him two years, and when he returned he found that the colonists had removed during his absence from their original settlement. The stormy weather prevented him from searching for them, and he returned to England; but no farther inquiry was made for these people, who were never afterwards heard of. Several voyages were made for trading with the inhabitants, but no permanent settlement was effected in Virginia while Raleigh's patent remained in force. In 1606, James I. bestowed patents for making settlements in different parts of Virginia, on two companies, one of which belonged to London, the other to Bristol. The London company, in 1607, despatched three ships carrying 110 planters, to take possession of that part of the country which had been granted to them. By a storm they were driven into the bay of Chesapeak—a place much more proper for a settlement than any they could have chosen; here they landed on the northern shore, and having formally taken possession of the country, fixed themselves at a place which they called James' Town, on the James river. To relate every minute transaction of an infant-colony, the disasters to which it was exposed by imprudence, and the accidents by which these disasters were retrieved, would ill-suit our present purpose. It may be observed, in general, that the first settlers of Virginia, as well as those of most other parts of America, seem not to have held the right of the Indians to their natal soil in very high respect. When, indeed, the ceremony of a purchase was performed, the equivalent rendered was of the most inadequate description;—very frivolous causes were sometimes deemed sufficient for depriving the natives of their lives and liberties. While the colonists conducted themselves in a manner so unjust, and so little calculated to ensure the good-

will of their neighbours, it is not surprising that wars should have been frequent, and animosities almost perpetual. In 1620, the government of Virginia was modelled in such a manner, as to resemble as much as possible the constitution of England. During the same year, negroes were first imported, and the cultivation of tobacco introduced. In 1626, Charles I. deprived the company of their charter, and constituted Virginia a royal government. During that revolution in England, which deprived Charles I. at once of his power and his life, and elevated Cromwell to the Protectorship, Virginia was the last portion of the English territories that acknowledged the Protector's authority; and it was the first that at the restoration acknowledged the sovereignty of Charles II. Charles, however, evinced but little gratitude towards the Virginians for the attachment which they had displayed in his cause. The restrictions imposed by Cromwell were continued by him: and others more severe were enacted. In particular, it was ordained that no foreign goods should be carried to the plantations, which had not first been landed in England: thus reducing American commodities, particularly tobacco, to a low price, and raising the value of European commodities as high as the avarice of the merchants deemed proper. Those grievances produced universal discontent, which at length broke out into a rebellion, and afforded the Indians an opportunity of committing the most daring outrages. Notwithstanding, however, of commercial restrictions, and the avarice and injustice of some of the governors, and the imprudence of others, this colony gradually acquired vigour, and had no inconsiderable influence in that contest which terminated with the confirmation of the rights of independent government to the United States.

New England owed its first settlement to religious persecution. In 1602, a number of religious people in the North of England, finding their ministers urged with subscription, and themselves greatly oppressed by the commissary courts and otherwise, entered into a mutual agreement 'to walk with God and one another in the enjoyment of the ordinances of God according to the primitive pattern,' whatever it might cost them. Among the ministers who joined this association, was Mr Robinson, a man of eminent piety and learning. In 1608, Mr Robinson's church removed to Amsterdam in Holland, and in the next year to Leyden, where they lived in great friendship and harmony among themselves and their neighbours, until they removed to New England. Their motives for this latter step were, to preserve the morals of their youth,—to prevent them, through want of emp oyment, from leaving their parents and engaging in business unfriendly to religion,—to avoid the inconveniences of incorporating with the Dutch,—and to lay a foundation for propagating the gospel in remote parts of the world. In 1619, they obtained leave from the Virginia company to settle in the northern parts of the territory included in their charter. It was resolved that the younger and more robust part of the congregation should sail for the new world, under the guidance of Mr Brewster, who was chosen their elder and teacher; while the remainder should abide in Holland with Robinson, till they could learn the success of the first adventurers, and till preparations could be made for their reception. A small vessel having been purchased in Holland, and one of greater burden hired in England, the little company embarked, after several solemn acts of devotion, and departed on their hazardous expedition. They had not sailed far, when the smaller vessel was found totally unfit for the voyage, and part of

the company was obliged to return with her; the rest proceeded on their voyage, and were at last landed, but not within the limits of the Virginian charter, nor at the place of their original destination. They had proposed to land at the mouth of Hudson's river; but the Dutch, then projecting a settlement in the same place, are suspected of having bribed the captain of the vessel in which they sailed to land them at Cape Cod, a place at a considerable distance to the N.E. of Hudson's river. The captain asserted that the year was too far advanced, and the navigation of the coast too dangerous, for him to think of advancing farther southward during that season; and the adventurers were, therefore, obliged to submit to settle in a district so unlike the country which they had been taught to expect. They named the place of settlement New Plymouth, that being the port from which they last departed in England, and it must be observed to their honour that they bought it fairly from the natives. As they were not within the limits of the charter of the Virginian company, their letters patent were considered as useless; but they bound themselves, by a written compact, to maintain civil authority and subordination, and, on the 11th November, 1620, John Carver was elected their first governor. The new settlers had to encounter, not only the horrors of a waste country, but the severity of a North American winter. No provisions could be obtained except such as they had brought with them; and the various hardships they endured brought on an epidemic sickness, which, before the return of spring, proved fatal to one-half of their number. In the course of this winter, king James bestowed on the duke of Lennox and several others, a patent, granting to them and their successors, the power of "planting, ruling, ordering, and governing the states of New England," Shortly thereafter, Massasoit, a powerful Indian chief in the neighbourhood, concluded an alliance with the colony, acknowledged the English king for his master, and by his assistance preserved the new settlers from that destruction which seemed ready to overwhelm them. In 1624, Mr Winslow, one of the colonists, was despatched to England to solicit a charter, which he obtained in terms so favourable, as to permit them to elect their own governor, and to enact provisional laws. The Puritans in England receiving intelligence of the success that had attended the enterprises of their brethren abroad, applied for and obtained a patent for the settlement and government of the lands about *Massachusetts' bay*; six ships, with 350 planters, and two non-conformist ministers, sailed from England, in 1629, and settling at Salem, laid the foundation of the commonwealth of Massachusetts. In 1630, several gentlemen, with about 200 settlers, and several ministers, arrived in this colony, and founded Charlestown, on the north side of Charles river, opposite to the place where Boston now stands; but soon after, observing that the south side of the river presented a much more commodious site for a city, they founded Boston, which afterwards became the capital of the colony.

In the meantime numerous adventurers daily arriving in the colony of Massachusetts, the country became so well peopled, that it was enabled to form a new settlement on the western frontiers. These adventurers settled on the bank of the river *Connecticut* which gave its name to the colony. They founded the city of Hartford; and in 1664 obtained a charter confirming to them all the privileges which they had assumed.

Several adventurers from England settled in the countries of *Maine* and *New Hampshire*; these remained, for some time, separate governments, but were afterwards united to that of Massachusetts. By William III.

Plymouth and Maine were annexed to Massachusetts; but New Hampshire was made a distinct government dependent on the crown.

The dangers to which the colonies of New England were subjected by attacks from the Indians, and the difficulties attending an effectual co-operation while in a separate state, became early visible; and a confederation had been projected prior to 1638. This important confederation, however, was not completely arranged and digested till 1643. It was then agreed, that a congress should be formed, of two commissioners from each colony, chosen annually, to be called 'the Representatives of the United colonies of New England.' Rhode Island was desirous of being admitted to the union; but was not then received. From this period, the New England states may be considered as forming one political body. Hudson's river was first discovered by Henry Hudson, an Englishman, from whom the Dutch purchased the right of establishing a colony on its banks. Attempts were soon made to settle upon it; and in 1615, a fort was built, and a small number of inhabitants fixed on the S.W. point of Manahattan's island, now the site of *New York*. In 1664, it was seized by the English; and, at the peace of Breda, in 1667, they were confirmed in the possession of it in return for Surinam, which they ceded to the Dutch. This fort, and consequently the whole colony, fell again into the hands of the Dutch in 1678, through the treachery of its governor; but, in the year following, it was restored to the English, who retained it till the revolution. During this long interval, nothing occurs in the history of this colony calculated either to amuse or instruct. It was considered as a proprietary government; and, though it had the form of an assembly, it appears to have been called together only twice. The first settlers were chiefly Episcopalians. If the history of New York be insignificant, that of *New Jersey* is, perhaps, still more so. This country, like New York, was first settled by the Dutch, who planted a colony in the county of Bergen, between the years 1614 and 1620. A few Swedes and Finns joined them in 1627; and, though the Dutch and Swedes were often at variance, they kept joint possession of the country for a considerable time. Charles II. in 1634, granted the whole territory called by the Dutch, *New Netherlands*, and of which New Jersey formed a part, to the duke of York his brother, who, in 1664, granted New Jersey to lord Berkley, and Sir George Carteret. The colony was in 1672 reduced by the Dutch; but, in 1674, it was restored to the English. In the same year, the duke of York received a new patent for the same country, and again divided it between the assigns of lord Berkley, and Sir George Carteret. The government of New Jersey continued to be proprietary, till it was divided into portions so small, and the number of proprietors had become so great, that the functions of government were continually impeded. The proprietors, influenced by this and other inconveniences, at last, in 1702, surrendered their authority to the British government, in consequence of which New Jersey continued till the revolution to be a royal government.

The history of the colony of *Pennsylvania* consists not, like that of many others, of a detail of religious dissensions; for such dissensions were prevented by a universal toleration in religion, from the first commencement of the settlement. Pennsylvania continued a proprietary government till the revolution. William Penn, a celebrated Quaker, in return for his father's services to the crown, and a large sum due from the crown to himself, obtained, in 1681, a grant of the country which, from his own name, was called Pennsylvania. In 1682, a settlement was made, and a form

of government established. In the year following, Penn prevailed on the colonists to accept a form of government different from that which had been first adopted. Penn's presence in England becoming necessary, on account of a dispute with lord Baltimore, concerning the bounds of their respective American possessions, he delegated the powers of government, in his absence, to five commissioners. In a short time, the proprietary superseded his five commissioners, and sent deputies to govern in his name. While Markham was governor, in 1696, another change in the administration was effected. Penn, once more, visited the colony in 1699, and during his stay the political institutions were for the last time revised, and that frame of government established which remained unaltered till the revolution. The Pennsylvanians, at an early period began to show that they both understood and valued freedom ; and in spite of the efforts of deputies, instigated by the arbitrary disposition of proprietaries, they maintained that freedom, and preserved the charter of privileges which they had originally maintained. It deserves to be specially recorded that the Pennsylvanians always treated the Indians in a kind and just manner. They purchased from them the lands which they occupied, with what the Indians accounted equivalent, and observed with punctuality the articles of every truce; and thus won from the natives that esteem and good will which proved the best preservative of the peace and safety of the settlement.

The Dutch, in consequence of the purchase of the banks of Hudson's River, imagined that they had acquired some right to all the unsettled countries in their neighbourhood. They accordingly, in 1623, planted a colony on the river *Delaware.* This colony was, in a short time, supplanted by one from Sweden ; and the country was alternately possessed by the Swedes and Dutch, till, at length both parties were subjected to the English. In 1674, Charles II. granted this district, as forming a part of the Dutch New Netherlands, to his brother the duke of York, who, in 1683, sold it to Penn ; from that time till the revolution it made part of Pennsylvania. The assemblies were different, but the same governor presided in both.

Many of the states of North America owe their first settlement to religious disputes. We have seen how the persecution of the Puritans peopled the states of New England ; and *Maryland*, we are informed, owed its first settlement to a persecution little less severe, which, in Britain, was carried on against the Roman Catholics. About 200 gentlemen of fortune and considerable respectability, with their followers, embarked for Maryland, hoping to enjoy that peace and that liberty of conscience, which their native country did not afford them. This colony arrived in Maryland in 1633, and Leonard Calvert, brother to lord Baltimore, was appointed the first governor. Lands were purchased of the Indians ; and, in a short time, the colony had increased in numbers and in importance. In 1638, the first assembly was appointed. The grand convention of England, in 1689, took the government from lord Baltimore, and made it a royal government ; and the dread of Popery, which had so much influence in producing the revolution in Britain, procured, in 1692, the establishment of the Protestant religion in Maryland. Lord Baltimore, however, recovered the property of this government in 1716 ; and retained it till the late American revolution, during which his property in lands was confiscated. The petition of his heir, at the close of the war, or the recovery of his right, was rejected by the legislature of this state.

The territory which is now known by the name of the state of *Kentucky*, was originally a part of Virginia. It was first visited by hunters, who, passing the Alleghany mountains, discovered a country equally fertile with that which they had left, and offering many enticements to settlers. Yet even so late as 1754, this fine district contained only 50 families; and these were all cut off in the course of a single year by the Indians. In 1774—the year in which lord Dunmore's expedition took place—the population was very thin; yet in 1785 the people conceived themselves sufficient to constitute a separate government, and petitioned the Virginian legislature for that purpose. This petition was not granted till 1792, when Kentucky was constituted a separate state, and its constitution arranged as has been already related.

Carolina was never successfully settled, till, by a patent of Charles II. dated 1663, it was bestowed on lord Clarendon, the duke of Albemarle, lord Craven, lord Berkley, lord Ashley, Sir George Carteret, Sir John Colleton, and Sir William Berkley. Proprietary governments have been seldom seen to flourish. Several colonies were established in different parts of the country; and various regulations were made for their management; and it is particularly worthy of remark, that a constitution organized by the famous John Locke, was found to be, though beautiful in theory, utterly unmanageable in practice. In 1680, Charleston was founded; and emigration to Carolina from different parts of Europe became frequent; but, by the incapacity of some of the governors, and the rapaciousness of others, the affairs of the colony were often involved in confusion. Religious dissensions were also excited, which tended much to retard the peace of the colonists. The Episcopalians, being the most numerous, procured to themselves the whole power, and constituted their religion that of the colony. To the disputes concerning religion succeeded a war with the Indians, who had been provoked here, as in the other colonies, to plan a massacre, of which the execution was but too successful. Seven of the proprietaries, in 1729, having disposed of their property and jurisdiction in this country to the crown, it was divided into North and South Carolina, both of which received constitutions, like the other colonies, modelled in imitation of that of the mother-country.

Georgia owes its first settlement to an exertion of charity. A company was, in 1732, incorporated by George II. for exporting to this part of America, free of expense, families labouring under the hardships of indigence. The design was laudable; but the execution of the project was not equally skilful. The many impolitic restrictions laid upon the colonists, produced a languor, from which their affairs never recovered, while the government continued to be proprietary. The charter, in 1752, was surrendered to the king; and the government modelled according to that of the other royal colonies; and the country was recovering slowly from its former debility, when it was again convulsed by the war with Britain. Since the revolution it has been frequently exposed to the inroads of the Indians.

America was originally peopled by uncivilized nations, which lived mostly by hunting and fishing. The Europeans, who first visited these shores, treating the natives as wild beasts of the forest, which have no property in the woods where they roam, planted the standard of their respective masters where they first landed, and in their names claimed the country by right of discovery. Prior to any settlement in North America,

numerous titles of this kind were acquired by the English, French, Spanish, and Dutch navigators, who came hither for the purposes of fishing and trading with the natives; and slight as such titles were, they were afterwards the causes of contention between the European nations.

While the settlements in this vast uncultivated country were inconsiderable and scattered, and the trade of it confined to the bartering of a few trinkets for furs—a trade carried on only by a few adventurers—no important controversy originated among the settlers, or the nations of Europe. But in proportion to the progress of population, and the growth of the American trade, the jealousies of the nations which had made early discoveries and settlements on the coast, were alarmed; ancient claims were revived; and each power took measures to extend and secure its own possessions at the expense of a rival.

War with Spain and France.] By the treaty of Utrecht, in 1713, the English claimed a right of cutting logwood in the bay of Campeachy, in South America; and in the exercise of this right, the English merchants had frequent opportunities of carrying on a contraband trade with the Spanish settlements on the continent. To remedy this evil, the Spaniards resolved to annihilate a claim, which, though often acknowledged, had never been clearly ascertained; they captured the English vessels in the Spanish Main, and many of the British subjects were doomed to work in the mines of Potosi. Repeated severities of this kind at length produced a war between England and Spain. Porto Bello was taken from the Spaniards by admiral Vernon; and commodore Anson, with a squadron of ships, sailed to the South seas, distressed the Spanish settlements on the western shores of America, and took a galleon laden with immense riches. But in 1741, a formidable armament, destined to attack Carthagena, under the command of lord Cathcart, returned unsuccessful, with the loss of upwards of 12,000 British soldiers and seamen. Shortly afterwards, however, Louisburg, the principal fortress of Cape Breton, was taken from the French by general Pepperell, assisted by commodore Warren and a body of New England troops. This war was ended in 1748, by the treaty of peace signed at Aix la Chapelle, in terms of which restitution was made on both sides of all places taken during the war.

War with France.] The peace, however, was of short duration. The French possessed Canada, and had made considerable settlements in Florida, claiming the country on both sides of the Mississippi by right of discovery. To secure and extend their claims, they established a line of forts on the English possessions, from Canada to Florida. They secured the important pass at Niagara, and erected a fort at the junction of the Alleghany and Monongahela rivers, called Fort du Quesne. They took pains to secure the friendship and assistance of the natives; and, had they proceeded with a very moderate degree of prudence, their interests might have been consolidated, and to this day they might have had large and valuable possessions in the New world. But this was far from being the case; and their conduct was marked by the most foolish temerity. The disputes among the settlers in America, and the measures taken by the French to command all the trade of the St Lawrence river on the north, and of the Mississippi on the south, excited the jealousy of the English nation, which soon broke forth into open war. In 1756, four expeditions were undertaken in America against the French. One, conducted by general Monckton, who had orders to drive the French from the province of Nova Scotia, was attended with success. General Johnson was

ordered, with a body of troops to take possession of Crown Point, but did not succeed. General Shirley commanded an expedition against the fort at Niagara, but lost the season by delay. General Braddock marched against fort Du Quesne, but in penetrating through the wilderness, he incautiously fell into an ambuscade, and suffered a total defeat; the general himself was killed, but a part of his troops were saved by the prudence and bravery of Washington—at this time a colonel—who now began to exhibit proofs of those military talents, by which he afterwards, conducted the armies of America to victory, and his country to independence. The ill success of these expeditions left the English settlements in America exposed to the depredations of both the French and Indians; but war now raged in Europe and the East Indies, and engaged the attention of both nations in these quarters. It was not until the campaign in 1758 that affairs assumed a more favourable aspect in America, when, upon a change of administration, Mr Pitt was appointed prime minister, and the operations of war became more vigorous and successful. General Amherst was sent to take possession of Cape Breton; and after a warm siege, the garrison of Louisburg surrendered by capitulation. General Forbes was successful in taking possession of Fort du Quesne, which the French thought fit to abandon. But general Abercrombie, who commanded the troops destined to act against the French at Crown Point and Ticonderago, having attacked the lines at Ticonderago, where the enemy was strongly intrenched, was defeated with a terrible slaughter of his troops. The next year, however, more effectual measures were taken to subdue the French in America. General Prideaux and Sir William Johnson began the operations of the campaign, by taking the French fort near Niagara; and general Amherst took possession of the forts at Crown Point and Ticonderago, which the French had abandoned. But the decisive blow, which proved fatal to the French interests in America, was the defeat of the French army, and the taking of Quebec, by the brave general Wolfe. This hero was slain in the beginning of the action, on the plains of Abram; and M. Montcalm, the French commander, likewise died on the field. The loss of Quebec was soon followed by the capture of Montreal by general Amherst, and Canada has remained ever since in possession of the British. In 1763, a definitive treaty of peace was concluded at Paris, between Great Britain, France, and Spain, by which the British were confirmed in the possession of all North America on this side the Mississippi, except New Orleans, and a small district of the neighbouring country.

Rupture with Britain.] During this war, which continued eight years, the Americans made such exertions as convinced the world that Britain derived from them no less strength in war, than wealth in peace; and the French became convinced, that the interests of France, and the preservation of the balance of power in Europe, required the separation of these colonies from the mother-country. From this period, therefore, may be dated the commencement of those designs which they formed for this purpose,—a purpose which some blunders in British politics, at length, enabled them to effect. The Americans were for several reasons, disposed to listen favourably to any proposal for their independence. Their forefathers had in many instances been forced to seek shelter from the violence of persecution; and their descendants still retained somewhat of that aversion to the ruling power, which the recollection of persecution is calculated to inspire. Their distance from the seat of government removed them from much of its influence; the equality in the circumstances of the

people nourished ideas of independence; and their exertions during the war with France inspired them with no mean notions of their own powers and resources. These, and similar causes, had conspired to cherish in the people a disposition, which only required a fit opportunity to induce it to shake off the authority of the parent-government.

While the Americans were thus daily imbibing higher notions of independence and self-importance, circumstances occurred which hastened the impending crisis. A debt of many millions had been incurred to the mother-country, by a war of which the main purpose was the defence of the colonies; and that these colonies, possessed of so great wealth, and so many internal resources, should contribute to the discharge of this debt, was an idea by no means unreasonable. But a plan for this purpose was adopted too hastily in imposing a direct internal tax upon the colonies by authority of parliament. The Americans did not deny the justice of their contributing to the payment of a debt of which a great part had evidently been incurred on their account; but they denied that a British parliament could tax them, unless they were allowed to send to it representatives. Parliament had indeed already passed several acts affecting the trade and navigation of the colonies, which, though highly disagreeable to the Americans, were not forcibly opposed. At last, on the 10th of March, 1764, a resolution imposing stamp-duties in every part of the colonies passed the house of commons. This was bringing the dispute to a crisis; the intelligence filled the colonists with alarm and indignation. At Boston the news were proclaimed by muffled bells, tolling a funeral peal; and the act itself under the title of 'The folly of England, and ruin of America,' was retailed in the streets, decorated with a death's head, and was afterwards publicly burned. Remonstrances were sent in from almost every state; petitions and remonstrances were enforced by resolutions against the importation of British manufactures; the merchants at home loudly complained of the decay of their trade, which had been occasioned by the American resolutions; and the British ministry were forced at last, indirectly to own that their measures had been too precipitately adopted, by repealing an act so universally offensive.

The chancellor, Mr Townshend, not much to the credit of his political sagacity, now imagined that he had discovered a new mode of raising a revenue in America, without offending the Americans. This was to impose a duty upon tea, paper, painters' colours, and glass, imported into America. It was impossible that such a scheme should escape the vigilance of American jealousy; its tendency was immediately perceived, and no less instantaneously resented. Massachusetts first declared her sentiments. From this colony circular letters were sent to all the provinces; and each of them, in a short time, adopted her opinions. Resolutions were renewed against the importation of foreign manufactures; and Boston again became the scene of riot and disorder. A vessel, which had neglected some of the new regulations, was seized by a man-of-war: the people immediately attacked the commissioners of excise, broke their windows, and obliged them to take refuge in Castle William, at the entrance of the harbour. The governor of Massachusetts meanwhile required them to recall their circular letter, and to rescind their resolutions and proceedings; but the members of his assembly accused him in his turn, and petitioned for his removal. Whereupon, as the last step of his power, he dissolved the assembly. The tumults at Boston daily increasing, troops were ordered to repair to this centre of discontent, to keep in awe the in-

habitants, who on their part, called upon the governor to convene an assembly. Exasperated by his refusal, they met of their own authority, and formed themselves into a convention, in which resolutions were adopted of the same nature with those for which the former assembly had been dissolved. Meanwhile the troops arrived, and restored the appearance of tranquillity; but a few of the inhabitants having quarrelled with a party of the military, the Bostonians hurried from all quarters to support their townsmen; and the soldiers having fired upon the crowd, and killed several persons, the whole province was instantly in arms, and the troops were obliged to take shelter in Fort William. This scuffle, which happened in 1770, would probably have proved the signal for commencing hostilities, had not the British ministry adopted a measure, which they fondly imagined might still reconcile to them their disaffected colonies. All the duties which had been imposed were repealed, except that upon tea. But it was not the difference of a few thousands of pounds in the amount of taxation that constituted the alleged grievance: it was the power claimed by the British parliament, of taxing a people who were not represented in it; and this claim was as plainly exemplified by a duty on tea, as by one on any other commodity. It was ridiculous to expect, therefore, that the repeal of the other taxes while this remained, could sooth the universal discontent; and the assembly at Boston soon convinced the British ministry that their expectations had been too sanguine. The tax upon tea was reprobated in the severest terms, not on its own account, but as an inlet to farther encroachments upon the liberty and property of Americans; the supremacy of the British government was disavowed; and the parliament was, in the most explicit terms, accused of having violated the rights of Americans. Copies of these proceedings were circulated in every state, and the discontent of Massachusetts was industriously propagated.

Boston was once more fated to be the scene of confusion. The resolution of the Americans against the importation of British commodities, was severely felt by the East India company, who thus lost an extensive market for their tea. To recompense their loss, the British government permitted the company to export their teas, free of any duty payable in Britain, in hopes, that as by this arrangement the colonists, on paying the duty of 3d. per pound on the landing of the tea in their harbours, would be able to buy it at a cheaper rate than they could do from the contraband dealers, their patriotic scruples would be silenced by their love of gain. In consequence of this permission, several ship-loads were despatched to America, and consignees appointed for its sale. Three of these vessels arrived in the harbour of Boston. The Americans certain, that, if the tea were landed, they could not with all their vigilance prevent it being clandestinely sold, resolved to prevent its coming on shore. The captains were willing to return to England with their cargoes, could they have procured the proper discharges from the governor, the custom-house, and their consignees; but these discharges were refused, and the vessels were obliged to remain in the harbour. It was under these circumstances that a few patriots, disguised as Indians, boarded the ships during night, and, without doing any other mischief, very deliberately tossed 342 boxes, being the whole of the ships' cargoes, into the sea. This daring act was perpetrated in November 1773. The British ministry, when informed of it, determined to inflict severe vengeance on the Bostonians. A fine was imposed upon the town, equal to the price of the tea which had been destroyed; and to enforce the payment of this fine, the harbour was to be shut up by

armed vessels, and, in this manner, its trade for a time annihilated. It was farther enacted, that any person who, in the support of the British government, should be indicted for murder, and be unable to obtain in Boston an equitable trial, might, for that purpose, be sent by the governor to some other colony, or even to Britain. The bill ordaining these measures was powerfully opposed by Mr Burke, but passed with very few negatives. The Bostonians felt severely the acts which shut up their port; but their cause was, in every colony, considered as the cause of America. They daily received addresses, commiserating them on their misfortunes, applauding their public spirit, and assuring them of support and assistance; Salem, a neighbouring town, refused to take advantage of the condition of Boston, for the augmentation of its own trade; and the inhabitants of Marblehead offered the Bostonians the use of their port, while that of Boston remained shut. Public meetings were held in every township; and the combination of the Americans in support of their rights appeared indissoluble. In the meantime, general Gage was appointed governor of Massachusetts, and immediately summoned the general court to meet at Salem. They had no sooner met than they declared the necessity of summoning a general congress, to be composed of delegates from all the provinces, to consider their universal grievances; they appointed five of the most violent opposers of the British government to represent them in this congress; they published a declaration of the injuries they had sustained, and exhorted the inhabitants to maintain their non-importation principles. Gage, perceiving, that to permit such an assembly to sit, was to overturn the purpose of his commission, immediately dissolved it.

Opening of the First Congress.] At length, in September 1774, according to appointment, the first congress met in Philadelphia. Peyton Randolph was chosen president of this assembly. This congress soon demonstrated the disposition of the great body of Americans, by bestowing the fullest approbation on the conduct of the inhabitants of Massachusetts; by exhorting them to continue their exertions in favour of their privileges; and assuring them that whatever damages they should sustain in so good a cause, should be repaid at the public expense. They addressed general Gage, informing him of the firm resolution of all the colonies to support their brethren in Massachusetts; they published a declaration of their rights as Englishmen and colonists; they reprobated the late acts of parliament, which they asserted to have been framed for their oppression; they returned their thanks to those members of parliament by whom their cause had been supported; and concluded by desiring all the colonies to be unanimous in the common cause, and petitioning the king for the redress of their grievances. These various documents were drawn up with great judgment and ability.

The number of British forces in Boston, was, in the meantime, daily augmenting. General Gage, for his own security, thought it necessary to fortify the neck of land by which Boston is joined to the main, and to seize the magazines of ammunition and military stores at Cambridge and Charleston, to prevent the provincialists from using them against himself. The Rhode Islanders, on the other hand, seized 40 pieces of cannon appointed for the defence of the place. At length the fury which had, hitherto, vented itself chiefly in menaces, burst into action. General Gage having despatched a detachment, under colonel Smith and major Pitcairn, to destroy some military stores which had been collected at Con-

cord, a town 20 miles from Boston, where the provincial congress then sat, the Americans poured in from every side, and the British troops, after having executed their commission, marched back through a continued and destructive fire.

Battle of Bunker's Hill.] The success of the provincials so much elevated their courage, that they collected in arms from all parts of the country to the relief of Boston; and in a short time 20,000 Americans were assembled before it. But, so well had it been fortified by Gage, that they durst not proceed to the attack; and about the latter end of May, the British were re-enforced by the arrivals of generals Howe, Burgoyne, and Clinton, and were enabled again to act on the offensive. Several inconsiderable skirmishes happened, in which the Americans sometimes had the advantage; but, on the 17th of June, an engagement of more consequence took place. During the preceding night, the Americans had taken possession of Bunker's hill, an eminence on the north side of Boston, which commands that city; and such was the expedition with which they wrought, that, before daylight, they had almost completed a redoubt, and a strong intrenchment. From these intrenchments it was resolved to dislodge them, and generals Howe and Pigot were landed at the foot of Bunker's hill,—the former to attack the intrenchments,—the latter to storm the redoubt. Neither the numbers nor intrepidity of the Americans could resist the impetuosity of the royal forces; the patriots were obliged to give way, and were driven beyond Charleston Neck; but in this engagement—as might have been expected—the loss of the British was much greater than that of the Americans, and though the provincials had been driven from Bunker's hill, they soon fortified the heights in the neighbourhood of Charleston, where they so strengthened themselves, that it was considered as vain to attempt to dislodge them. This commencement of hostilities fixed the determination of such provinces as had hitherto wavered; and Crown Point and Ticonderago forts, which connect the colonies with Canada, were taken by the American generals, Easton and Allen, without public orders.

Proceedings of Congress.] Congress meanwhile acted with the greatest determination and vigour. It drew up articles of confederation, which were solemnly agreed to by the representatives of the thirteen provinces. By these articles it was ordained that each colony was within itself independent, and to have absolute sovereignty in all its domestic concerns. Delegates to congress were to be annually elected, to meet at such time and place as should be appointed by the preceding congress. This assembly was to have the power of determining war or peace, making alliances, and all such powers as are claimed by sovereign states. The expenses of war were to be defrayed from the common treasury, and to be raised by a poll-tax upon all males from 16 years of age to 60; and the proportions of this tax were to be determined by the laws of each colony. An executive council was appointed to act during the recess of congress. They, at the same time, published a declaration of the wrongs by which they had been induced to take up arms. This declaration is expressed in the most spirited terms: "Were it possible," said they, "for men who exercise their reason, to believe that the divine Author of our existence intended a part of the human race to hold an absolute property in, and unbounded power over others, marked out by His infinite goodness and wisdom, as the objects of a legal domination, never rightfully resistible, however severe and oppressive; the inhabitants of these colonies might at

least require from the parliament of Great Britain some evidence that this dreadful authority over them had been granted to that body; but a reverence for our great Creator, principles of humanity, and the dictates of common sense, must convince all those who reflect upon the subject, that government was instituted to promote the welfare of mankind, and ought to be administered for the attainment of that end. The legislature of Great Britain, however, stimulated by an inordinate passion for power, not only unjustifiable, but which they know to be peculiarly reprobated by the very constitution of that kingdom; and despairing of success in any mode of contest where regard should be had to law, truth, or right; have, at length, deserted those, attempted to defend their cruel and impolitic purpose of enslaving these colonies by violence, and have thereby rendered it necessary for us to close with their last appeal from reason to arms. Yet, however blinded that assembly may be, by their intemperate rage for unlimited domination, so to slight justice in the opinion of mankind, we esteem ourselves bound, by obligations to the rest of the world, to make known the justice of our cause." After enumerating their several causes of complaint, and the injustice with which they alleged they had been treated, they concluded thus: "We are reduced to the alternative of choosing an unconditional submission to tyranny, or resistance by force. The latter is our choice. We have counted the cost of this contest, and find nothing so dreadful as voluntary slavery. Honour, justice, and humanity, forbid us tamely to surrender that freedom which we received from our gallant ancestors, and which our innocent posterity have a right to receive from us. Our cause is just; our union is perfect; and, if necessary, foreign assistance is doubtless attainable. We fight not for conquest; we exhibit to mankind the remarkable spectacle of a people attacked by unprovoked enemies. They boast of their privileges and civilization, and yet proffer no milder conditions than servitude or death. In our own native land, in defence of the freedom that is our birthright, for the protection of our property, acquired by the honest industry of our forefathers and our own, against violence actually offered, we have taken up arms; we shall lay them down when hostilities shall cease on the part of our aggressors, and all danger of their being renewed shall be removed—and not before."

This declaration, together with the resolute spirit every where displayed by the inhabitants, must certainly have been sufficient to convince the British that the colonies would never submit without being forced to do so; but from the beginning of the quarrel to its end, neither party seems ever to have adopted any measure that indicated a wish of reconciliation. With regard to the British, if they meant America to make part of their empire, it was but reasonable that the common rights of British subjects should be extended to every part of it: and, among the rest, that no part should be subjected to taxation, without having representatives in that assembly by which taxes were imposed. If they meant to exercise sovereignty in their colonies, without allowing them any legislative voice, their intention was indefensible on the principles of the British constitution. If the colonists, on the other hand, intended to be reckoned part of the empire,—if they wished to claim its protection when necessary, and, at the same time, would only contribute towards the general revenue such sums as they thought proper,—their ideas were no less foolish than those they censured in the British. But, however equitable it must have appeared to allow to American representatives a seat in the British parliament, there were several reasons why neither the British were willing to grant that privilege, nor the Americans

to receive it. America is an extensive continent. It contained at that time a population more than equal to the population of Scotland; and was likely in a few generations, to contain a population exceeding that of the whole British islands. The Americans might probably, in time, therefore, have obtained the ascendency in the British parliament; they might even have ultimately removed the seat of government from the Old to the New world, and thus deprived Britain of that importance which she had long maintained among civilized nations. The Americans, on the other hand, by becoming part of the British empire. would have subjected themselves, not only to such taxes as were necessary for their own government and defence, but to their share of such taxes as were necessary for the government and defence of Britain. They would have subjected themselves not only to such taxes as were necessary to meet future exigencies, but to such as were necessary to pay the interest of past debts. By separating themselves entirely from Britain they would, for a long time at least, be free from that burden which Britain had incurred by her numerous wars; they would disentangle themselves from embarrassments with several powerful nations, which were disposed to attack them as the colonies of the mother-country; and they would free themselves from many of those restraints upon their trade, which they accounted so prejudicial to their interests. When we consider that so many circumstances of such magnitude were opposed to the amicable agreement of both parties, we may be convinced that the greatest political abilities were necessary to reconcile their jarring interests; or rather, we may with safety conclude, that whatever had been the abilities of British statesmen at that period, it was impossible that any lasting union could have been effected between Britain and her colonies. If we add to these jarring interests, the assistance that America was certain of receiving from the foes of Britain, and the difficulty with which it was to be supposed she could defend herself from those foes at home, and carry on an offensive war against America abroad, we have no reason to be surprised at the obstinacy with which the colonists refused to comply with the demands of the British. To these considerations we must also add that several European nations had, by their political intrigues, considerably alienated the affections of the colonies from the mother-country. The French in particular, on this theatre, showed themselves more successful in politics than in war; but, while they planned a revolution in America, they laid the foundation of another in France, which overturned the very court by which the former was contrived; so short-sighted are politicians with regard to the tendency of their own schemes.

War was now the avowed resolution of both parties; and both made vigorous preparations for carrying it on. The patriot army was organized, and George Washington was unanimously created commander-in-chief. Horace Gates was made adjutant-general; and Charles Lee major-general of the provincial troops. The patriot generals Montgomery and Schuyler, with 3000 men, attempted the conquest of Canada; but after undergoing innumerable fatigues, and displaying much bravery, the scheme was completely defeated. The governors of the provinces endeavoured, for some time, to maintain their places, and to reclaim the disaffected; but were all ultimately obliged to save themselves by flight. The single town of Boston was all that Britain now possessed of her American provinces: and that town was besieged by such an army as threatened to expel from it the few troops by whom it was occupied. In March, 1776, general Washing-

ton opened batteries against it, and for 14 days bombarded it with the utmost fury; and, on the 17th of that month, general Howe, to whom Gage had yielded the command of the town, was permitted quietly to evacuate it, and sail with the garrison to Halifax; taking with him about 2000 of the inhabitants, who were attached to the British cause, but leaving to the Americans a considerable quantity of military stores.

Declaration of Independence.] The Americans, on the 4th of July, 1776, declared themselves independent; and formally renounced all connexion with Britain. This declaration, and the reasons for it, were circulated in all the colonies, and met the approbation of them all, except Maryland, but this state was soon induced to join the confederacy. In the mean time the British projected an expedition against Charleston in South Carolina, which failed; but another against New York was more successful. It consisted of 6 ships of the line and 30 frigates, besides a great number of armed vessels and transports. The command of this fleet was given to admiral Howe; and his brother, general Howe, was ordered to leave Halifax, with the troops under his command, and to wait at Staten island, on the coast of New York, to take the command of the land-forces, and co-operate with his brother. In July, admiral Howe arrived; and, after having, in quality of commissioner for receiving the submission of the colonists, in vain endeavoured to bring about a reconciliation, he determined to make use of the forces under his command to enforce submission. The troops were landed on Long island without opposition; the patriots, under general Putnam, lay on the opposite shore, behind a range of hills, of which the principal pass was called Flat bush. An engagement took place here on the 27th of August. Of the Americans upwards of 3000 were killed, and 1,100 were taken prisoners; while the British had only 61 killed and 257 wounded. Lord Howe, imagining that this victory would be sufficient to bring congress to the desired terms, despatched general Sullivan, one of his prisoners, to them, with a message, informing them that though he could not treat with them under the political character which they had assumed, yet, such was his desire of a reconciliation, that he was willing to consult with any of them in their private capacity, on the means most proper for bringing it about. But congress knew too well the value of the object for which they contended, to yield on the first defeat. They informed the messenger that they could not consult with the enemies of their country in any other character than that which their country had bestowed on them; but, that it might not be said that they were averse to peace, they would appoint a committee to wait on lord Howe, in order to learn his proposals. This committee, consisting of Dr Franklin, Mr Adams, and Mr Rutledge, declared, that it was necessary to lay down the independency of the states as a preliminary article; this peremptory assertion agreeing so ill with his lordship's designs, necessarily brought the consultation to a speedy conclusion, and lord Howe prepared to prosecute war.

Having published a manifesto, in which he declared the refusal of congress to accept of a reconciliation, Howe attacked New York, and, with great ease, drove the Americans from it, to the N. end of the small island on which that city stands. The American army was again attacked and defeated; but the defeat was by no means so decisive as that which they had experienced at Flat Bush. Howe then turned his arms against the forts in the neighbourhood of New York, and, in a short time, part of New York and the whole of New Jersey were in the possession of the British, whose line extended from New Brunswick to the Delaware. Sir Henry

Clinton also took possession of Rhode island, without the loss of a man; whilst admiral Hopkins, with the American fleet, which had been fitted out with much care, was obliged to run up the river Providence, as far as the vessels would float. A second expedition to Canada terminated in a manner no less disastrous than the first. The term for which the provincial soldiers had enlisted was expired, and they daily left the army in great numbers; so that of 30,000 men who opposed general Howe at New York, scarcely 3000 could now be mustered; and Lee, one of the most expert among the American generals, was made prisoner. But, before the end of the campaign, Washington obtained a victory over a body of Hessians posted not far from Philadelphia, which, though not of great importance, tended in some measure to reanimate the courage of the dispirited Americans.

In the spring of 1776, every exertion was made to recruit the patriot army, and Washington once more saw himself at the head of a respectable force, consisting of soldiers, not enlisted for one year, but for three years, or during the continuance of the war. With this force he posted himself between the British army and Philadelphia, too strongly to be dislodged; but, on the 11th of September, the American army was attacked and entirely defeated; on the 26th general Howe took possession of Philadelphia, and laid open the navigation from Philadelphia to the sea.

Burgoyne's Expedition.] In the northern provinces, the British arms were not equally sucessful. New England had always been considered not only as the original, but the great supporter of revolutionary principles: the conquest of this part of the country, therefore, was considered as the surest method of checking what was called the American rebellion. To effect this important conquest, general Burgoyne was put at the head of 4000 British troops, and 3000 Germans. With this army he encamped, in June 1777, on the western side of Lake Champlain, where he was joined by a numerous body of Indians, and soon after captured Ticonderago, a fort of great strength, and garrisoned by 6000 men. The Americans retired from Fort George and Fort Edward, to Saratoga, where they were put under the command of general Arnold. Colonel St Leger, who had been sent on an expedition on the Mohawk river, to make a diversion in favour of the main body of the British army, had already laid siege to Fort Stanwise, and general Burgoyne wished to advance towards him, that he might either enclose the Americans between the two parties, or effect a junction with the colonel. But St Leger's Indian allies, intimidated at the report of Arnold's approach with 2000 men, deserted in such numbers as to oblige him likewise to retreat, and Burgoyne found it not only imprudent, but even impossible, to advance a step, till provisions could be procured. At the beginning of October, provisions had become so scarce in the British camp that the soldiers were put on short allowance; meanwhile American volunteers flocked together from every quarter, so that, while Burgoyne could scarcely muster 6000 men, the provincial army amounted to upwards of 16,000. Every part of the British camp was exposed, not only to the grape and rifle-shot of the enemy, but to a perpetual discharge of their artillery. In this dangerous situation, with their provisions daily decreasing, and without the possibility of acquiring more, the British army waited with fortitude till the 13th, when an inventory of provisions was made, and it was found that the whole could not subsist the army, even at short allowance, longer than three days. With much reluctance, therefore, they were obliged to capitulate; but they were to be

allowed a free passage to Britain, on condition of not serving against America during the war. On this occasion the Americans got 35 brass field pieces, 7000 stand of arms, clothing for an equal number of soldiers, with the tents and military chest. Sir Henry Clinton had in the mean time sailed up the Hudson, and, with a very small loss of men, taken from the Americans property to a great amount, and destroyed more which could not be carried off. But, had he relieved the troops under general Burgoyne—which he could easily have done by destroying Gates's stores at Albany—he would have rendered his country a much more essential service.

Treaty with France.] It was not to be supposed that the foes of Britain would view with indifference her contest with her colonies. In February 1778, a treaty was concluded and formally signed between France and the United States of America. Of this treaty the substance was as follows:

I. If Great Britain should, in consequence of this treaty, proceed to hostilities against France, the two nations should mutually assist each other.

II. The main end of the treaty was in an effectual manner to maintain the independence of America.

III. Should those places of North America still subject to Britain be reduced by the colonies, they should be confederated with them, or subjected to their jurisdiction.

IV. Should any of the West India islands be reduced by France, they should be deemed its property.

V. No formal treaty with Great Britain should be concluded either by France or America without the consent of each other; and it was mutually engaged that they should not lay down their arms till the independence of the States had been formally acknowledged.

VI. The contracting parties mutually agreed to invite those powers that had received injuries from Great Britain to join the common cause.

VII. The United States guaranteed to France all the possessions in the West Indies which she should conquer; and France in her turn guaranteed the absolute independency of the States, and their supreme authority over every country they possessed, or might acquire during the war.

The Americans did not confine their negotiations to France. They had agents in the courts of Madrid, Vienna, and Berlin, endeavouring to obtain from them, if possible, assistance, or at least an acknowledgment of their independence. Clinton now resolved to evacuate Philadelphia, probably because the retention of it employed a great number of troops, without yielding any adequate advantage. Washington no sooner learned his intentions, than he resolved to attack him on his march; but the British army marched onwards without any successful interruption, till they were taken aboard the fleet which conveyed them to New York. In the mean time count D'Estaing had sailed from Toulon, on the 14th of April, with 12 ships of the line and a number of large frigates, and arrived on the coast of Virginia in the beginning of July, while the British fleet was employed in conveying Clinton's forces, after their evacuation of Philadelphia, from Sandy Hook to New York. The British admiral had likewise 12 ships of the line, with a few frigates; but though they were all of a force much inferior to those commanded by D'Estaing, the French admiral lay off Sandy Hook till the 22d of July, entirely inactive. In conjunction with the Americans, he next made an attempt on Rhode island, which signally failed.

Operations in the Southern States.] The southern colonies had hitherto been the seat of only occasional expeditions; but an attempt by the Americans to overrun West Florida called the attention of the British to that quarter, and it was immediately resolved to fit out an expedition against Georgia. For this purpose commodore Hyde Parker was despatched with a fleet; colonel Campbell was to command the land-forces; and, with him, general Prevost, who commanded in East Florida, was to co-operate. The British arrived on the coast in December, and in 10 days the whole province was subjected. The Spaniards, in June 1779, having joined the confederacy against Britain, invaded West Florida; and, as it was almost destitute of troops, became masters of the whole with little opposition

The British forces had, for some time, been posted on the islands in the neighbourhood of Charleston, waiting for such reinforcements and artillery as might enable them to attack that city. At length general Clinton embarked a body of troops, and sailed to prosecute the attack. The fleet passed Charleston bar on the 20th of March, and the land-forces took possession of Charleston neck on the 29th. After sustaining a siege of a month it capitulated, and Clinton, early in June, returned to New York. Besides the losses sustained by the Americans in war, they were now much embarrassed in their finances. Congress was composed of persons who knew little of that intricate part of their business. Their exigencies forced them to issue bills of credit, but their executive wanted that vigour which was necessary to procure sums for the purpose of redeeming those bills. They were consequently daily depreciating in value; and between the years 1777 and 1780, they had fallen so low, that their real value was only about one-fortieth of the sum at which they were nominally rated. The embarrassment produced by such a circumstance was severely felt by such as were engaged in military services; but amidst all these embarrassments, the anniversary of independence was, in 1780, celebrated at Philadelphia, with much solemnity.

A body of French troops, consisting of 6000 men, commanded by M. Ternay, was, on the 10th of July, landed on Rhode island; but the principal scene of action was now transferred to the southern provinces. Earl Cornwallis—to whom the command of the British troops in these quarters had been delegated by Clinton, on the 15th of August 1780—defeated general Gates, and was joined by many of the inhabitants of South Carolina, who remained attached to the royal cause. On the 11th of January he put his troops in motion to penetrate into North Carolina; but though successful in every engagement, repeated conflicts had so diminished his numbers, that re-enforcements were necessary to enable him to keep the field with advantage. Trusting, therefore, to the efforts of the other British generals in North America, to forward him what was necessary to his success, he took possession of the posts of York-town and Gloucester, in Virginia, where he fortified himself in the best manner he could. To surround this part of the British army, the Americans crowded from every quarter, and were joined by a considerable number of French troops under the count de Rochambeau. Clinton no sooner was relieved from his apprehensions for New York, than he set out immediately with 7000 men, in order, if possible, to assist Cornwallis. He arrived at the entrance to Chesapeak bay on the 24th of October, but was informed that Cornwallis had surrendered on the 19th, after a defence which, though not equal in splendour, was perhaps conducted by no less skill, perseverance, and

courage, than had been exemplified in the acquisition of his former victories. The British army, when it surrendered, consisted of upwards of 6000 men, but of these many were unfit for duty. The army to which it surrendered consisted of 13,000 Americans, besides a large body of French, with a considerable train of artillery. The troops were, by the articles of capitulation, to be prisoners to the United States, and the seamen to the king of France. A considerable unmber of cannon, and some military stores, fell into the hands of the Americans.

Treaty of Peace.] The surrender of Cornwallis convinced his countrymen, that if the conquest of America was possible, it was likely to cost more than the contest merited. They were now willing, therefore, to abandon a struggle, in which there was so much to lose and so little to gain. The European powers, who had espoused the cause of American independence, were likewise willing to accede to terms of pacification. After the surrender of Cornwallis, nothing of any importance was transacted in America. Sir Guy Carleton arrived at New York, on the 5th of May, 1782, and informed general Washington, that, along with admiral Digby, be was commissioned to treat of peace with the Americans; and that, to convince them of the sincerity of his intentions, the independence of the states was admitted as a preliminary article. When this intimation was given to congress, they were at first apprehensive that the British intended to draw them into a treaty separate from their allies the French,—a measure to which they declared themselves unwilling to accede. In the meantime, however, negotiations were conducting in France for the reconciliation of all the belligerent powers; and on the 30th of November, provisional articles of peace were signed, in which his Britannic majesty acknowledged the colonies to be free, sovereign, and independent states. The independence of the United States was acknowledged, by Holland, in April, 1782; by Sweden, in February, 1783; by Spain, in March, and by Russia, in July, 1783.

Thus terminated the American revolutionary war. For the American patriots it "issued prosperously"—to quote one of their own writers,— "because it was begun and was conducted under the auspices of private and public virtue. Our liberty," the same writer continues, "did not come to us by accident, nor was it the gift of a few leaders, but its seeds were sown plentifully in the minds of the whole people. It was rooted in the conscience and reason of the nation. It was the growth of deliberate convictions and generous principles liberally diffused. We had no Paris,—no metropolis, which a few leaders swayed, and which sent forth its influences, like 'a mighty heart,' through dependent and subservient provinces. The country was all heart. The living principle pervaded the community, and every village added strength to the solemn purpose of being free."

Articles of Confederation.] The Americans, during the war, had agreed to certain articles of confederation, which were to form the bases of their general government. It could scarcely be expected that these should not contain numerous imperfections. They were framed by men acquainted perhaps with the petty transactions of single colonies, but strangers to the management of a great nation. These imperfections were felt during the war; but the state of the infant government was, at that time, such as not to admit of nice legislation. When peace was established, various modifications of the existing articles of confederacy seemed necessary, and were loudly demanded by the people. It appeared highly necessary that some constitutional form should be adopted, by which both the rulers

and the ruled might know the extent of their powers and privileges. In particular, the necessity of a more energetic executive soon became visible. During the war, the love of independence, which generally prevailed, had influenced the separate states willingly to contribute their proportions of men and money for the common defence; but when the sense of danger was removed with the presence of an enemy, the states became at first remiss, and were afterwards almost totally deficient in the payment of such sums as were necessary to discharge the interest of the national debt, and to answer the purposes of government. Accordingly, after much discussion, and violent opposition from different parties, that constitution was adopted which shall be afterwards particularized, and Washington was chosen the first president of the United States. The following table shows, at one view, the date of the ratifications of the several states, and the majority that appeared in favour of this ratification:

Delaware,	December 3,	1787,	unanimously.
Pennsylvania,	December 13,	do.	46 to 23.
New Jersey,	December 19,	do.	unanimously
Georgia,	January 2,	1788,	unanimously
Connecticut,	January 9,	1788,	128 to 40.
Massachusetts,	February 6,	do.	187 to 168.
Maryland,	April 28,	do.	63 to 12.
South Carolina,	May 23,	do.	149 to 73.
New Hampshire,	June 21,	do.	57 to 46.
Virginia,	June 25,	do.	89 to 79.
New York,	July 26,	do.	30 to 25.
North Carolina,	November 27,	1789,	193 to 75.
Rhode Island,	May 29,	790,	
Vermont,	January 10,	.791.	
Kentucky.			

The vast quantity of paper-money which had been issued during the struggle for independence was now productive of many mischiefs. Public credit was almost entirely annihilated; and the evil was aggravated by the nefarious speculations, not of individuals only, but of states. The proceedings of congress, too, in many cases, gave much offence to the people; and in 1786, the discontented party in Massachusetts broke out into actual rebellion, in consequence of the imposition of certain taxes necessary to the discharge of their share of the interest of the national debt. The long wars in Europe, consequent on the French revolution, proved of immense advantage to the United States, by throwing into their hands a great part of the carrying trade of the belligerent powers. If we except, however, frequent wars with the Indians, generally waged on the most flimsy pretexts, and for the purpose of driving them from their grounds,—the purchase of Louisiana from France,—and the unprincipled attack upon the Floridas, at the moment when the Spanish cortes was struggling for national independence against the power of France,—little of political importance occurred in the history of America, till the period of the late rupture between it and this country. For many years previous to this rupture, the relations between Great Britain and the United States of America, exhibited a very singular aspect. The nations were not, indeed, in a state of open war with each other; but the conflict of opposite pretensions, the angry discussion of many intricate questions of international law, the charges and recriminations which had for a series of years formed the only subject of their diplomatic intercourse, had diffused over both countries a strong and ever-waking spirit of distrust and animosity.

War with Britain.] The event so long anticipated at last arrived;

and, on the 18th of June, 1812, the president of the United States intimated his approval of an act of congress, by which war was declared against Great Britain. This act, which was passed in the house of representatives by a majority of 79 to 49, was preceded by a long message from the president, on which some stormy debates arose in both houses of congress. The message accused the British government of having, since the year 1803, persisted in a series of acts hostile to the United States as an independent nation. It set forth, that British cruisers had violated the honour of the American flag, and siezed persons sailing under it; that the seizure, even of British subjects, without trial or inquiry, was unjust, but that, under pretence of searching for them, American citizens had been pressed on board of British ships, and compelled to fight for their oppressors; that British cruisers had violated the rights and the peace of the American coast; that the commerce of America had been plundered on every sea; and that Great Britain had at length resorted to a sweeping system, under the name of orders in council, suited to her own commercial views, and highly injurious to the trade of the United States.

While these transactions were taking place in America, a despatch was received from Paris, by the American envoy at London, announcing the formal revocation, by the French government, of the Berlin and Milan decrees as far as regarded America. This revocation, although only communicated in the year 1812, was dated as far back as April, 1811. No doubt could be entertained, that this official notification had been extorted from the French government, in consequence of the British declaration, that as soon as the French decrees should be repealed, the British orders in council should cease. After having for two years, therefore, refused any explanation to America, Bonaparte came forward, in May, 1812, with a decree antedated the 11th of April, 1811, and that decree even referring to the year 1810, from which period, it was alleged that these notable edicts, in so far as respected America, had been repealed. So gross an insult on the good faith and honour of nations was, perhaps, never offered by any government. But although the alleged repeal of the Berlin and Milan decrees was attended with so many suspicious circumstances, and continued nevertheless to be acted upon, the British government had many obvious reasons at the time for not being over scrupulous on that point, and for avoiding—if that could be done by any honourable concessions—a war with the United States. Britain had already numerous and formidable enemies to contend with; she was engaged in the most arduous contest she had ever waged, not only against France, but the whole continent of Europe, Spain and Portugal excepted; and these powers, so far from being able to aid her against this new foe, required her assistance against France, for the recovery of their own independence; she had also the interests of her commerce to maintain, which are always dependent in a considerable degree on friendly relations with America. Moved by these considerations, the British government issued a declaration for the repeal of the orders in council. It stated, that by a prior declaration, of the 1st April, 1812, the repeal of the orders in council was to take place as soon as the French decrees were formally revoked; that a communication had been made, by the American charge de affaires, to Lord Castlereagh, of a copy of the alleged instrument of repeal by the French government; and although this revocation was not such as to satisfy the conditions required by the British declaration, yet, as Great Britain was anxious to replace the commerce of neutrals on its ancient basis, the orders in council of 7th January, 1807, and 26th April,

1809, were suspended, as far as regarded American property, from the 1st of August following, just five days after war had been declared by the United States. But the arrival of this intelligence in America, did not appear in the slightest degree to restore a pacific disposition on the part of that government, which, considering this concession on the part of Britain, only as an indication of weakness, was led from thence to heighten its tone, magnifying into vast importance minor points, and advancing pretensions subversive of the rights of every belligerent power. A war so differently affecting the different parts of the Union, could not but be received with great diversity of feeling. A remarkable example of opposition to the war was given in a memorial addressed to the president, from the county of Rockingham in New Hampshire, of which the following are extracts : " The alarm excited in our minds by the favourite and long continued 'Restrictive system,' is raised still higher by the late declaration of war against Great Britain; an event which, we believe, in the present defenceless circumstances of the country, will be productive of evils of incalculable magnitude. The impressment of our seamen, which forms the most plausible and popular of the alleged causes of war, we believe to have been the subject of great misrepresentation. The number of these cases has been extravagantly exaggerated. Every inquiry on the subject strengthens our conviction, that the reputed number bears little relation to the true number. We are among those to whom instances of impressment, if they did actually exist to any considerable extent, must be known; yet we cannot find them out." " It is well known that England pretends to no right of impressing our seamen. She insists only that she has a right to the services of her own subjects, in time of war, even though found serving on board the merchant ships of other nations. This claim we suppose to be neither unfounded nor novel. It is recognised by the public law of Europe, and of the civilized world. Writers of the highest authority maintain that the right belongs to all nations. For the same reason, say they, that the father of a family may demand the aid of his children to defend himself and his house, a nation may call home her subjects to her defence and protection in time of war." " England has always professed a willingness to adjust this subject by amicable arrangement. She has repeatedly called on us to do our part towards effecting such adjustment. She has reminded us of the facility, we may say the falsity, with which American protections are obtained; of the frequent instances in which Irishmen, and even men that cannot speak a word of our language, are found with American protections in their pockets. She has expressly and officially offered to prohibit, by severe laws, all impressment from American vessels, if the American government would enact laws prohibiting American officers from granting protections or certificates of citizenship to British subjects. She has also, through her minister, offered to restore every native seaman that our government could name, as being under impressment. For years preceding the declaration of war, our government has been, in a manner, silent on this subject. When the arrangement was made with Mr Erskine, the present administration themselves did not consider any existing difficulties on the subject of impressment as insuperable obstacles to peace. The blockade and orders in council,—the other causes of war, bear no better examination than the subject of impressment. The blockade, now so grievous to be endured, we know was regarded, at the time it was laid, as a measure favourable to our interest. We know this, upon the express declaration of Mr Monroe, then

our minister in England. We have his own words, that it would be regarded 'in a favourable light,' and that it 'promised to be highly satisfactory to our commercial interests.'"

"We are equally unsatisfied with the arguments used, to prove that the decrees of France were repealed in November, 1810. Against such supposed repeal of the French decrees, we have the express declaration of the French government itself, as late as March, 1812, alleging that these decrees did then exist. We have also had daily evidence of their operation, in the destruction of our property; and some members of this meeting have convictions of the existence and operation of those decrees, down to the very moment of our declaration of war; which convictions being produced by great and repeated personal losses, in the seizures, detention, confiscation, and burnings, under those very decrees, are not likely to be removed, by any ingenious comments on the terms of an ambiguous, deceptive, and fallacious instrument like the duke of Cadore's letter. The conduct of France, in relation to the repeal of her edicts, exhibits to our view a scene of the most contemptible fraud and juggling that ever disgraced the court of any nation."

A similar spirit, though somewhat more guarded, was displayed in the resolutions of a body of more weight and consequence, being a convention of delegates from 34 cities and counties of the state of New York, held at Albany on the 17th and 18th of September. As the language in this document is so forcible and just, we will make the following extract: "Resolved, that without insisting on the injustice of the present war, taking solely into consideration the time and circumstances of its declaration, the condition of the country, and state of the public mind, we are constrained to consider, and feel it our duty to pronounce it, a most rash, unwise, and inexpedient measure; the adoption of which ought for ever to deprive its authors of the esteem and confidence of an enlightened people —because, as the injuries we have received from France are at least equal in amount to those we have sustained from England, and have been attended with circumstances of still greater insult and aggravation—if war were necessary to vindicate the honour of the country, consistency and impartiality required that both nations should have been included in the declaration. Because, if it were deemed expedient to exercise our right of selecting our adversary, prudence and common sense dictated the choice of an enemy from whose hostility we had nothing to dread. A war with France would equally have satisfied our insulted honour, and, at the same time, instead of annihilating, would have revived and extended our commerce—and even the evils of such a contest would have been mitigated by the sublime consolation, that by our efforts we were contributing to arrest the progress of despotism in Europe, and essentially serving the great interests of freedom and humanity throughout the world. Because a republican government, depending solely for its support on the wishes and affections of the people, ought never to declare a war, into which the great body of the nation are not prepared to enter with zeal and alacrity; as where the justice and necessity of the measure are not so apparent as to unite all parties in its support, its inevitable tendency is to augment the dissensions that have before existed, and by exasperating party violence to its utmost height, prepare the way for a civil war. Because, before a war was declared, it was perfectly well ascertained, that a vast majority of the people in the middle and northern states, by whom the burden and expenses of the contest must be borne almost exclusively, were strongly

opposed to the measure. Because we see no rational prospect of attaining, by force of arms, the objects for which our rulers say we are contending—and because the evils and distresses which the war must of necessity occasion, far overbalance any advantages we can expect to derive from it. Because the great power of England on the ocean, and the amazing resources she derives from commerce and navigation, render it evident, that we cannot compel her to respect our rights, and satisfy our demands, otherwise than by a successful maritime warfare; the means of conducting which we not only do not possess, but our rulers have obstinately refused to provide. Because the exhausted state of the treasury, occasioned by the destruction of the revenue derived from commerce, should the war continue, will render necessary a resort to loans and taxes to a vast amount —measures by which the people will be greatly burthened and oppressed, and the influence and patronage of the executive alarmingly increased. And, finally, because of a war begun with such means as our rulers had prepared, and conducted in the mode they seemed resolved to pursue, we see no grounds to hope the honourable and successful termination.

" Resolved, That the late revocation of the British orders in council has removed the great and ostensible cause of the present war, and prepared the way for an immediate accommodation of all existing differences, inasmuch as, by the confession of the present secretary of state, satisfactory and honourable arrangements might easily be made, by which the abuses resulting from the impressment of our seamen, might in future be effectually prevented. Therefore,

" Resolved, That we shall be constrained to consider the determination on the part of our rulers to continue the present war, after official notice of the revocation of the British orders in council, as affording conclusive evidence, that the war had been undertaken from motives entirely distinct from those which have been hitherto avowed, and for the promotion of objects wholly unconnected with the interest and honour of the American nation."

At Boston, on the day of the declaration of war, all the ships in the port displayed flags half-mast high, the usual token of mourning; and a town meeting was held in that city, in which a number of resolutions were passed, stigmatising the war as unnecessary and ruinous, and leading to a connexion with France destructive to American liberty and independence. But very different were the popular sentiments in the southern states, where swarms of privateers were already preparing to reap the expected harvest of prizes among the West India islands. Of the towns in this interest Baltimore stood foremost in violence and outrage.

Campaign of 1812.] The first military operations of the Americans were attended with the most signal disasters. General Hull, who invaded Upper Canada, ended his short career, by surrendering himself and the whole of his army, amounting to 2,500 men, prisoners of war, with the fort of Detroit, and 33 pieces of cannon, to the British major-general Brock, who obtained almost a bloodless victory. A second attempt to invade this province was made by the Americans under general Wadsworth, who, on the 13th of October, attacked Queenstown with a considerable force. He was at first successful in carrying that position, but Brock having come up with a small body of men, composed of regulars, militia, and Indians, a successful attempt was made to turn the flank of the Americans, while their attention was engaged by an attack of artillery in front. The Americans thus assailed at all points, were, after a short but

spirited conflict, completely defeated, and general Wadsworth, with the whole of his officers, and upwards of 900 men, made prisoners.

Naval Successes.] The Americans, however, were more successful upon an element where it was imagined they had no chance of success at all. On the 19th of August, the Guerriere British frigate was captured by the American frigate Constitution, captain Hull, after a desperate action of about two hours, in which the Guerriere had 78 men killed and wounded, and was reduced to such a complete wreck, that the Americans were obliged to set her on fire. On the 25th of December also, the Macedonian frigate was captured, after an obstinate and severely contested action, by the American frigate United States, captain Decatur; and on the 29th of December, the Java frigate, captain Lambert, was captured off the coast of Brazil, by the American frigate Constitution, now under the command of commodore William Bainbridge, after a severe action of above two hours, in which the British captain was killed, and 124 of his crew were killed and wounded. The Java was so much shattered before she struck, that the Americans were obliged to destroy her. The triumph of the Americans on account of these their first naval victories tended greatly to console them for their disasters by land. On the other hand, the British people began to think that their navy was either ill-directed, or beginning to degenerate. There was, however, no just cause for either of these surmises, as the superior size and weight of metal of the American frigates gave them a decided superiority over the British vessels. The largest of the captured frigates did not exceed 1050 tons, while the American frigates, the Constitution, President, and United States, originally intended for line of battle ships, were of 1600 tons burden and upwards admeasurement, and were armed with 14 twenty-four pounders, long guns, on each side, on their maindeck, and on their quarterdeck and forecastle, which nearly met, with 13 thirty-two pounder carronades on each side, making a total of 54 heavy guns: nor was the disparity in the number of the crews less striking, for while the Guerriere at the time of her action could only muster at quarters 244 men and 19 boys, the Constitution had a crew of 476 picked men. It was nevertheless clear, that the American vessels were fought with a skill and gallantry which the British had not been accustomed to meet with in contending with the French and the Spaniards.

Campaign of 1813.] The campaign of 1813 commenced with a third attempt to invade Canada, which proved equally disastrous to the invaders with the former. At the opening of this campaign, the American army of the west was placed at the foot of Lake Erie, under general Harrison; the army of the centre under generals Wilkinson and Dearborn, in the vicinity of the falls of Niagara, between Lakes Erie and Ontario; and the army of the north, under general Hampton, on the banks of Lake Champlain. The object of these forces was, by combined operations, to reduce the two Canadas. Accordingly, on the 22d of January, general Winchester, with the right wing of general Harrison's army, marched to the attack of Detroit, and occupied Frenchtown with about 1000 men. Here he was attacked by colonel Proctor, with about 500 regulars and militia, and 600 Indians. In about a quarter of an hour the American army gave way, and the retreat of the remainder being cut off by a division of the Indians which had been detached in their rear, Winchester capitulated, and the whole were taken prisoners. After the loss of the right wing, under general Winchester, general Harrison retreated to fort Meigs.

The American army of the centre consisted of about 7,000 men, 4,000 of whom were stationed in the vicinity of Sacket's Harbour, and 3,000 at the head of the Niagara river. A corps of their best troops, under general Dearborn, having arrived off York, the capital of Upper Canada, major-general Sheaffe, at the head of 700 regulars and militia, and 100 Indians, vigorously opposed their landing, but was obliged to retire before overwhelming numbers, and York, with a garrison of 295 militia, capitulated. The capture of Fort George and Fort Erie quickly followed that of York; but these conquests were only transient, for before the end of June the Americans were compelled to abandon all the posts they held on the left bank of the Niagara.

The fall of Forts George and Erie had left the Americans at liberty to pursue their successes; and, accordingly, generals Chandler and Winder advanced with 3,500 infantry, and 250 cavalry, from Forty Mile Creek, for the purpose of attacking the British position at Burlington Heights, near the head of Lake Ontario, where colonel Vincent was posted with his division. This officer, aware of the vast superiority of the force with which he was menaced, determined to attack the American camp in the night. With a force not exceeding 700 men, he addressed himself to this enterprise. The Americans, completely panic struck, were driven from their camp with great loss, and generals Chandler and Winder were both among the prisoners taken.

During these operations, Sir James Yeo, commanding the British flotilla on Lake Ontario, made an attack upon Sacket's Harbour, and succeeded in destroying all the naval stores collected at that point. On Lake Erie, however, the case was reversed. Having here assembled a considerable naval force, consisting of nine vessels, carrying 54 guns, under commodore Perry, they succeeded in capturing the whole British force in that quarter, consisting of six vessels, carrying 60 guns, but much lighter than those of the Americans, after a smart action fought on the 10th of September.

The capture of the British squadron on Lake Erie compelled the British to abandon the Michigan territory, and all the posts in Upper Canada beyond the Great River; and general Harrison, whose army had been augmented to about 10,000 men, availing himself of the important co-operation and assistance of the American squadron, under commodore Perry, now completely master of Lake Erie, again invaded Upper Canada. General Proctor, unable to contend with the overwhelming force of his adversary, was compelled to retire, dismantling the forts, and destroying the stores before abandoning them. Three armies, each amounting to nearly 10,000 men, now marched from different points upon Lower Canada. While general Harrison proceeded along lake Erie, general Wilkinson embarked his division upon Lake Ontario, and general Hampton marched to Montreal. These troops, however, were quite unable to contend with British discipline. Hampton's whole corps was arrested for a day by 300 Canadian militia; and additional forces coming up, he immediately fell back, and evacuated the province. Wilkinson succeeded in effecting a landing near Kingston. But lieutenant-colonel Morrison, who was stationed at that place with a small detachment, immediately followed him, and an action took place 20 miles above Cornwall, in which the American army, though six times superior in numbers, was totally routed, with the loss of 1000 men. The enemy precipitately crossed the St Lawrence, and, abandoning his boats, retreated by a difficult country to Plattsburg;

but the disasters of the Americans did not stop here. On the 25th December, a British and Indian force having surprised Fort Niagara, destroyed or made prisoners the whole garrison. The British then crossed the river, attacked general Hull, who had collected about 2000 men on the other side, and put him totally to the rout. The present year, therefore, terminated in a manner as brilliant for the British arms as the preceding.

Thus, amid partial reverses, the campaign by land was, on the whole, glorious and fortunate for Great Britain. At sea, too, she regained that ascendency which naturally belonged to her. The first instance in which this superiority was established, was attended with circumstances particularly gratifying. Captain Broke, of the Shannon frigate, with another small vessel attending him, had been cruising for some time near the harbour of Boston, where the Chesapeake frigate then lay, but the latter, though much superior, particularly in men, did not venture to come out. Captain Broke, however, anxious to make a fair trial of the comparative valour of his own and the enemy's seamen, dismissed the vessel which accompanied him, and, with the Shannon alone, drew up before the harbour of Boston in a posture of defiance. The Chesapeake accepted the challenge; and came out to decide, as it were, by single combat, this contest between the two nations in maritime prowess. The two vessels came almost immediately in contact, and captain Broke, observing that the Americans at this critical moment flinched from their guns, gave immediate orders for boarding, and in less than ten minutes the whole of the British crew were on the decks of the Chesapeake. In two minutes more, the enemy, after a desperate but disorderly resistance, was driven from every post, and the Americans from the shore beheld the British colours flying over the vessel, which had just left their harbour in full assurance of victory. The arrival of admiral Warren at Bermuda established the naval superiority of Britain in those seas.

Campaign of 1814.] The earlier military events of 1814 were upon the same limited scale, and partook of the same inveterate character of hostility as those of the former campaigns. On the 3d of July, a large American force, under general Brown, crossed the Niagara frontier with about 6,000 men, and advancing into Canada, attacked general Rial, who had under him about 2,000 men. After a smart action, the British were defeated, with the loss of about 500 men killed and wounded, and compelled to retreat upon their lines at Chippawa, and from thence to a position near Niagara.

On the 25th of July, general Drummond, at the head of re-enforcements, advanced to the support of general Rial; and a close and desperate action took place, in which the roar of the cannon and musquetry vied with that of the neighbouring cataract of Niagara, till midnight, when the Americans, having sustained a loss in the action amounting to 1,500 men, retreated precipitately to Chippawa, and from thence on the following day to Fort Erie, after destroying their stores and abandoning their camp. The number of Americans engaged in this remarkable action might be about 5000; that of the British did not exceed 2,800 men. Shortly after this, general Brown being joined by the American army under general Izard, again assumed the offensive; and general Drummond found it prudent to raise the siege of Fort Erie and retire to Queenstown. The Americans advanced to Chippawa, but finding that the British had obtained the complete ascendency on Lake Ontario, and were advancing to the support of general Drummond, and to land a force in their rear, they retreated with

precipitation; and without halting to make good the possession of Fort Erie, blew up the fortifications, and retired to the other side of the river.

While the Americans were thus driven from Canada, the British were not more successful in an attempt to invade the United States. Sir George Prevost having commenced operations against the American territory, by an attack upon Plattsburg, a fortified town on Lake Champlain, was repulsed with loss. A more successful display of British courage and skill, however, was given in an expedition against the capital of the United States, under admiral Cochrane and major-general Ross. The expedition entered the Patuxent on the 19th August; and having landed the army, which ascended the banks by land, admiral Cockburn, with a flotilla of small craft, proceeded up the river on their flank. The American commodore, Barney, who had taken refuge in the Patuxent, finding escape impossible, set fire to the flotilla under his command. On the 24th, about mid-day, the British troops reached Bladensburg, where they found the American army, consisting of from 8000 to 9000 men, strongly posted on commanding heights, on the opposite side of the eastern branch of the Potomac. In less than half an hour from the commencement of the action the Americans dispersed and fled, although the number of British troops which entered this action did not exceed 1,500. The retreating army being ordered to move upon Washington, general Winder repaired to that city, where a council was hastily called, at which it was the prevailing opinion, that from the dispersion of a large proportion of the American force, and the disorganized state of the remainder of the army, the defence of the city was impracticable. Under this desponding impression, the troops were ordered to retreat to George Town, and to take up a position upon the heights in the vicinity of that place. General Ross, after having halted his army for a few hours, determined to march upon Washington, and at eight o'clock in the evening the army under his command reached that city. Judging it of consequence to complete the destruction of the public buildings with the least possible delay, the capitol, including the senate house and house of representatives, was consigned to the flames; and the arsenal, the dock-yard, the treasury, the war-office, and the president's palace, with a rope-walk, and the great bridge across the Potomac, shared the same fate. In the dock-yard, a frigate nearly ready to be launched, and a sloop of war, were consumed. The object of the expedition being thus accomplished, general Ross determined to withdraw the troops, before any great force of the enemy could be assembled. On the evening of the 25th, the army left Washington; and having reached Benedict on the 29th, the whole force was embarked on the following day without molestation. The total loss of the British in the battle of Bladensburg amounted only to 64 killed and 185 wounded. Two hundred and six pieces of cannon, 540 barrels of gunpowder, and 100,000 ball-cartridges, swelled the trophies of the victorious army. All private property was strictly respected, insomuch, that when it was represented that burning one of the houses last mentioned might compromise the safety of others adjacent, the order for destroying it was immediately recalled. Yet the deliberate destruction of public buildings not designed for military purposes, is a mode of carrying on war exceedingly to be deprecated, and the effect of the burning those at Washington showed it to be as impolitic as it was certainly rigorous. Without doing any vital injury to the United States, it subjected them to a disgrace still more painful and difficult to be forgotten or forgiven. It procured for them the general sympathy of other

nations; and what was of much more importance, it went far to unite in a common feeling of wrongs to be resented and revenged, that large proportion of the Americans usually called federalists, who had hitherto been averse to the war.

The town of Alexandria, situated lower on the Potomac than Washington, was attacked by the British about the same time; and the common council of Alexandria agreed to surrender the town, protection being promised to private property. All naval and military stores and merchandise being delivered up to the captors, and stowed on board 21 vessels which were found in the harbour, the British departed loaded with spoil. Baltimore was the next object of attack, and on the morning of the 12th September, a disembarkation of the British troops was effected near North Point, about thirteen miles distant from that town. The approach lies through a small peninsula, in some places scarce half a mile in breadth, across which the enemy had drawn an intrenchment. This was carried without loss, but, as the troops advanced, they were harassed by the enemy's riflemen. General Ross, who had at the fatal moment advanced to reconnoitre, received a mortal wound from a rifle-ball, and living only to recommend his young and unprovided family to the protection of his king and country, expired on the spot. In a smart action which ensued, the British maintained their military superiority, and in less than fifteen minutes utterly broke and dispersed an army of about 6,000 infantry, supported by artillery and cavalry, the Americans losing near 1,000 in killed, wounded, and missing. But it was the fate of the successes obtained during this incursive war, to be followed by no important results. Baltimore was defended by a chain of fortified redoubts, connected by a breastwork, and occupied by about 15,000 men; and colonel Brooke, who had succeeded to the command of the British troops, was induced to relinquish his purpose, and to re-embark his forces, after destroying a large rope-work, and other public buildings.

In the same spirit of detached military adventure, an expedition, which had sailed from Halifax, on the 6th of July, under Colonel Pilkington, possessed themselves with little resistance of the islands in the bay of Passamaquoddy; and the fortified post, called Machias, being reduced, the whole district, from Passamaquoddy bay to the Penobscott river, remained in undisturbed possession of the British.

When the winter season had closed the operations of the armaments in the northern parts of the United States, a strong force, amounting to about 10,000, was despatched to the south, for the purpose of reducing New Orleans, the capital of Louisiana. After completely destroying or capturing the American flotilla on Lake Borogne, the troops were landed on the 23d December, at the head of the lake, without opposition. In advancing towards New Orleans, several smart skirmishes took place with the advance of the American army, under general Jackson, whose whole force amounted to about 14,000 men. He was unable, however, to arrest the progress of the British, until they had driven him behind the works which covered the city. On the 8th January, 1815, the whole British army was formed for a general assault upon the American lines, which were strongly covered by a canal and breast work in front, with the Mississippi on the right, and a cypress-swamp on the left. A detachment, under colonel Thornton, was appointed to cross the Mississippi, and carry the flanking battery on the right side of that river, but various unforeseen difficulties retarded the execution of this part of the plan, till the co-operation

had lost its effect. The attack commenced with a shower of bombs and Congreve rockets, the army advancing at the same time to storm the right and left of the American intrenchments, from which a tremendous fire was kept up on the British; the American infantry in front being constantly supplied with loaded muskets by those in the rear, while very few of the British shot comparatively could touch them. Sir Edward Packenham, the commander of the British forces, as soon as he had made the signal from his station for the troops to advance, galloped on to the front to animate them by his presence, and was seen with his hat off, encouraging them to the front of the glacis: it was here that (almost at the same moment) he received two wounds, one in the knee, and another, which was fatal, in the body. The fall of their commander, in the sight of the troops, at the same time with many other commanding officers, and further, the preparations to aid in crossing the ditch not being so forward as they ought to have been, caused a wavering in the column, which, in such a situation, became irreparable; and, after some deliberation, it was judged proper to draw off the troops, and abandon the attack. Meantime, colonel Thornton had crossed the Mississippi, and attacked the flanking battery. Here the determination of the British troops overcame all difficulties, and the Americans were driven from their redoubts and batteries, leaving sixteen pieces of ordnance, and the colours of the New Orleans regiment, in the possession of the British; but as the attack on the principal part of the position had failed, colonel Thornton was ordered to retire, and join the main army. In this disastrous battle, the loss of the British, in killed, wounded, and missing, amounted to 2,040. This heavy loss extinguished all hopes of success; the troops were accordingly re-embarked, and the enterprise abandoned.

The concluding operation of the war, in the gulf of Mexico, was the reduction of Fort Bower, on Mobile Point. The actions at sea this year, were few in number and unimportant, unless as displaying the skill and bravery of both countries. The American government now began to find great difficulty in reconciling the nation to the continuation of a war which seemed to have no object. The downfall of Bonaparte involved in it a subversion of all the hopes that Britain, engaged in struggling for existence in Europe, would soon tire of defending so remote a possession as the province of Canada; and it seemed still more unlikely that America should, by means of a few frigates, wrench the trident of the ocean from a nation which possessed a thousand ships of battle. The real and ostensible purposes of the war, therefore, were now alike out of prospect. President Madison had voluntarily retreated from the non-importation and non-intercourse acts—measures which had ruined the commerce of America; and the only purpose of continued hostilities, seemed to be the vindictive infliction of mutual injury, the devastation of property, and the waste of human life. The eastern states of America, always averse to the war, had become impatient of its intolerable pressure. Their commerce had been ruined, and their property taxed, to maintain a contest of undefined length, peculiarly unfavourable to their interests, and which now seemed to be carried on without any object or prospect of termination. The bitterest complaints were also made by the legislatures of these states, and particularly those of New England, that the executive government withdrew from them the troops which they had raised for their own local defence, and employed them on other purposes and objects. This was a point for which the union had made no provision, and the disputes to which

it gave rise seemed not unlikely to be the means of dissolving it. The state of Masachusetts took the decisive step of calling a convention from the other states of New England, to consider the defect in the constitution, which placed the defensive means of the several states at the disposal of the executive government, and in which it was roundly asserted, that the union had failed to procure to the eastern states the benefits which were its chief objects. The ominous words, separation and independence, were already familiar in their mouths, and it seems not unlikely that the continuance of the war might have produced that dissolution of the American league which has been so often predicted. The financial difficulties of the American treasury, too, became every day more pressing. A loan had been pronounced to be impossible; and the issuing of treasury bills was resorted to, combined with a formidable list of taxes, and which nearly doubled the burdens of the people. All these circumstances had their effect on the mind of the president, Mr Madison, and he sought a road out of the difficulties in which he was involved, by proposing a negotiation for peace under the mediation of Russia.

Great Britain had also strong reasons for desiring a termination of this unhappy war. The commerce of America was already annihilated, and her sailors only subsisted by privateering; she had no fleets to send to sea, and her solitary frigates continued with the same happy dexterity to escape from and return to the ports of her extended continent. At sea, then, our commercial interests were certain to suffer, and we could only hope for the occasional satisfaction of capturing an armed vessel, after she had done more damage by a hundred fold than her guns and timber were worth. On land the prospect was hardly more flattering. Any extended plan of serious invasion, or conquest of any part of the American states, was a measure obviously impolitic, even if it could have been judged practicable. On the other hand, descents upon the coast, the destruction of public property and stores, the burning of their sea-ports, and destruction of their shipping, were measures, indeed, fully within our power, and suited to the vindictive feelings of the moment, but were far more likely to exasperate than to subdue the enemy. The American proposal for negotiating under the mediation of Russia, was distinctly and positively declined by the British government; but they readily consented that commissioners should be named by each nation to adjust terms of pacification "upon principles of perfect reciprocity not inconsistent with the established maxims of public law, and with the maritime rights of the British empire." This proposal was accepted, and the commissioners having met at Ghent, a treaty was concluded, on terms which left the relative situations of the two countries pretty much the same as they stood previous to the breaking out of the war. There was however some difference, and it was unfavourable to America. No mention was made of the maritime rights which had been the alleged cause of the war; and the question may be negatively said to be decided in favour of Great Britian, for America renounced her demand of satisfaction for the captures made under the orders in council. The islands in the bay of Passamaquoddy, captured by the British, were retained on the ground that they never properly belonged to the United States, but to the British province of Nova Scotia; and commissioners were to be afterwards appointed to decide this and all other questions relating to boundaries. The Indians were to be restored to the rights and possessions which they held in 1812. Since this period, the United States have not been engaged in any political transaction of importance.

Concluding Reflections.] We conclude this historical summary with the following reflections of the viscount Chateaubriand :—" The discovery of the representative republic by the United States is one of the greatest political events that ever occurred. This event proves that there are two practicable kinds of liberty : the one belonging to the infancy of nations, the offspring of manners and of virtue, the liberty of the first Greeks and of the first Romans, and the liberty of the savages of America; the other born in the old age of nations, the offspring of knowledge and reason, the liberty of the United States, which has superseded the liberty of the Indian. Will America preserve its last kind of liberty? Will there not be a division in the United States? May we not already perceive the germs of these divisions? Has not a representative of Virginia already supported the thesis of the ancient Greek and Roman liberty, with the system of slavery, against a deputy of Massachusetts, who advocated the cause of modern liberty without slaves, such as Christianity has made it? Will not the western states, extending themselves farther and farther, and being too remote from the Atlantic states, be desirous of having a government to themselves? Lastly, are the Americans a perfect people; have they not their vices like other men? are they morally superior to the English, from whom they derive their origin? Will not the tide of foreign emigration, incessantly pouring upon them from all parts of Europe, eventually destroy the homogeneousness of their race? Will not the mercantile spirit gain the ascendancy? Is not self-interest beginning to be a predominant national defect among them?

" We are obliged to confess with pain, that the establishment of the republics of Mexico, Colombia, Peru, Chili, and Buenos Ayres, is pregnant with danger to the United States. While the latter had about them nothing but the colonies of a Transatlantic kingdom, war was not probable. May not rivalships now spring up between the old republics of North America and the new republic of Spanish America? Will not the latter interdict alliances with European powers? If both sides should have recourse to arms—if the military spirit should take possession of the United States—a great captain might arise ; glory loves crowns; soldiers are but brilliant forgers of chains, and liberty is not sure of preserving its patrimony under the guardianship of victory. Let what will happen, liberty will never be entirely banished from America ; and here it is right to specify one of the great advantages possessed by liberty the offspring of knowledge, over liberty the offspring of manners. Liberty, the offspring of manners, perishes when its principles deterioriate, and it is in the nature of manners to deteriorate with him. Liberty, the offspring of manners, begins before despotism in the days of poverty and obscurity; it is lost in despotism, and in ages of glory and luxury. Liberty, the offspring of knowledge, shines after ages of oppression and corruption; it advances with the principle which preserves and renews it; the knowledge, of which it is the effect, instead of becoming feeble with time, like the manners which give birth to the first liberty—knowledge, I say, grows stronger on the contrary with time; thus it forsakes not the liberty which it has produced—constantly about that liberty, it is at once its generative virture and its inexhaustible source.

. " To conclude ; the United States have one safeguard more ; their population does not occupy an eighteenth part of their territory. America still dwells in the wilderness ; for a long time to come her deserts will be her manners, and knowledge her liberty." •

CHAP. II.—PHYSICAL FEATURES.

Aspect of the Country.] We transcribe, from Malte Brun, the following sketch of the physical aspect of the country:—" From the shores of the Atlantic to the Mississippi, the United States present an immense natural forest, interspersed, however, with open and naked plains, called *prairies*, which are numerous on the western side of the Alleghanies, but very rare on the eastern side.[6] In the country west of the Mississippi, wood is comparatively scarce; and in the arid and desert plains, occupying a breadth of three or four hundred miles to the E. of the Rocky mountains, only a few trees are seen on the banks of the rivers. In the inhabited part of the United States, the lands cleared and cultivated, probably, do not exceed one-tenth part of the surface. There is a diversity in the American woods, according to the climate, soil, and situation of the different districts; and some naturalists have distinguished the vegetation of the United States into five regions. 1*st.* The region of the N.E., bounded by the Mohawk and Connecticut rivers, where firs, pines, and the other evergreens of Canada prevail. 2*d.* The region of the Alleghanies, where the red and black oak, the beech, the balsam poplar, the black and red birch, often overshadow the plants and shrubs of Canada, at least as far as North Carolina. The valleys among these mountains are remarkably fertile in corn. 3*d.* The upland country, extending from the foot of the mountains to the falls of the rivers. Here the prevailing trees are the red maple, the red and black ash, the walnut, the sycamore, the acacia, and the chestnut. To the S., the magnolia, the laurel, and the orange are interspersed through the forest. Tobacco, with the indigo and cotton plants, succeed as far north as the Susquehanna, beyond which pastures prevail. 4*th.* The region of maritime pines, which extends along the Atlantic coast from the sea to the first elevations: the long-leafed pine, the yellow pine, and the red cedar, occupy the dry grounds; and the acacia-leafed cypress, the low and moist soils, as far as the Roanoke, or even the Chesapeake. Further to the north we find the white pine, the black and Canadian fir, and the *thuya occidentalis.* The rice-grounds commence where the tide-water becomes fresh, and terminates where it ceases to be felt. 5*th.* The western region, which, no doubt, admits of sub-division, but, in which, generally speaking, the forest trees are, the white oak, the black and scaly walnut, the walnut hicory, the cherry, the tulip-tree, the white and gray ash, the sugar-maple, the white elm, the linden, and the western plane, which all grow to a great size upon the Atlantic coast.

" But the varying elevation of the ground, necessarily blends the characters of these different regions. Looking, therefore, at the forests of the United States as a whole, the most universally diffused trees are, the wil-

[6] " It is true, indeed," says Volney, in 1796, " that on the the shores of the Atlantic this continental forest displays some openings formed by the brackish marshes, and the cultivated fields that are continually extending round the absorbing focus of the cities. It has also some considerable vacancies in the western countries, particularly from the Wabash to the Mississippi, and towards the borders of Lake Erie, the St Lawrence, in Kentucky and Tennessee, where the nature of the soil, and still more the ancient custom of the annual conflagrations of the savages, have produced spacious deserts called *savannahs* by the Spaniards, and *prairies* by the Canadians, as also by the Americans who have adopted this term. Throughout the rest of the United States, particularly the mountainous parts of the interior, whence the rivers flow in opposite directions, some to the Mississippi, others to the Atlantic, the realms of forest have experienced as yet but slight infringements on their domain, and, compared with France or England, it may be said that the entire country is one vast wood."

low-leafed oak, which grows in the marshes; the chestnut oak, which, in the southern states, rises to a prodigious size, and which is as much esteemed for its farinaceous nuts as for its wood; the white, red, and black oak; the two species of walnut also, the white and the black (the latter valued for its oil), the chestnut, and the elm of Europe, abound almost as much as the oak in the United States. The tulip-tree and the sassafras, more sensible to cold than these others, are stunted shrubs at the confines of Canada—assume the character of trees in the Middle States; but upon the hot banks of the Alatamaha, they develope their full growth, and display all their beauty and grandeur. The sugar-maple, on the other hand, is not seen in the Southern States, except upon the northern slopes of the mountains, while, in the colder climates of New England, it reaches its full natural dimensions. The amber-tree, which yields an odorous gum, the iron-wood (*carpinus ostrya*), the American elm, the black poplar, and the *taccamahaca*, are found growing in every place where the soil suits them, without showing any great preference for one climate more than another. The light and sandy soils are covered with this useful tribe of pines, with the common fir, the beautiful hemlock fir, the black and the white pine. We may also class with this family of trees, the *arbor vitæ*, the juniper of Virginia, and American red cedar. Among the shrubs generally diffused in the United States, we may reckon the chionanthus, the red maple, the sumach, the red mulberry, the thorn-apple, &c.

"The United States, generally speaking, do not present the beautiful verdure of Europe; but among the larger herbs which cover the soil, the curiosity of botanists has distinguished the *collinsonia*, which affords the Indians a remedy for the bite of the rattle-snake; several species of *phlox*; the golden lily; the biennial *œnothera*, with several species of star-flower, of *monarda*, and of *rudbeckia*. It is in Virginia, and in the southern and south-western states, that the American Flora displays its wonders, and the savannas wear their perpetual verdure. It is there that the magnificence of the primitive forests, and the exuberant vegetation of the marshes, captivate the senses by the charms of form, of colour, and of perfume. If we pass along the shores of Carolina, Georgia, and Florida, groves in uninterrupted succession seem to float upon the waters. By the side of the pine is seen the *paletuvier* (the only shrub which thrives in salt water), the magnificent *lobelia cardinalis*, and the odoriferous *pancratium* of Carolina, with its snow-white flowers. The lands to which the tide reaches, are distinguished from the lands which remain dry by the moving and compressed stalks of the *arundo gigantea*; by the light foliage of the *nyssa aquatica*; by the *taccamahaca*; and by the white cedar, which perhaps, of all the trees of America, presents the most singular aspect. Its trunk where it issues from the ground, is composed of four or five enormous bearers, which uniting at the height of seven or eight feet, form a sort of open vault, from the summit of which rises a single straight stem of 18 or 20 feet in height without a branch, but terminating in a flat canopy, shaped like a parasol, garnished with leaves curiously figured, and of the most delicate green. The crane and the eagle fix their nests on this aërial, platform; and the paroquets, while leaping about, are attracted to it by the oily seeds inclosed in the cones suspended from the branches. In the natural labyrinths which occur in these marshy forests, the traveller sometimes discovers small lakes and open lawns, which would present most seductive retreats, if the unhealthy exhalations of autumn permitted him to

inhabit them. Here, he walks under a vaulted roof of *similax* and wild vines, among creeping *lianas*, which invest his feet with their flowers; but the soil trembles under him, clouds of annoying insects hover around, monstrous bats overshadow him with their hideous wings, the rattle-snake musters his scaly terrors, while the wolf, the carcajou, and the tiger cat, fill the air with their savage and discordant cries.

"The name of *savannahs* is given to those vast prairies of the western region, which display a boundless ocean of verdure, and deceive the sight by seeming to rise towards the sky, and of which the only inhabitants are immense herds of bisons or buffaloes.[7] The name is also given to those plains which skirt the rivers, and are generally inundated in the rainy season. The trees which grow there, are of the aquatic species. The *magnolia glauca*, the American olive, the *Gordonia argentea*, with its odorous flowers, are seen here, isolated or in groupes, open above, while the general surface of the savanna exhibits a long and succulent herbage, mixed with

" [7]When seen from the summits of the Mexican and the Rocky mountains, they seem absolutely boundless to the view. They are not to be considered merely as dead flat, but undulating into gentle swelling lawns, and expanding into spacious valleys, in the centre of which is always found a little timber, growing on the banks of the brooks and rivulets of the finest water. Pike, who viewed them from the summit of the Blue mountain, under the source of the Arkansaw, says, "the unbounded prairie was overhung with clouds, which seemed like the ocean in a storm, wave piled on wave, and foaming; while the sky over our heads was perfectly clear, and the prospect was truly sublime." It would seem that the view of these unbounded prairies excited the same sensations in the mind of Pike, that the appearance of the steppes of Kapshac did to Timur Bec, who ascended a mountain (says his historian Sharisoddin Ali) and viewed with admiration those vast plains, which, for their extent and verdure, resembled the sea. In these vast prairies the soil is dry, sandy, with gravel; but the moment we approach a stream, the land becomes more humid, with small timber. It is probable that these steppes or prairies were never well-wooded, as, from the earliest ages, the aridity of the soil, having so few water-courses running through it, and these being principally dry in summer, no sufficient nourishment has been afforded to the growth of timber. In all timbered land, the annual discharge of the leaves, with the continual decay of old trees and branches, creates a manure and moisture, which, are preserved from the heat—the sun not being permitted to direct his rays perpendicularly, but to shed them only obliquely through the foliage. But in Upper Louisiana, a barren soil, parched and dried up for 8 months in the year, presents neither moisture nor nutriment sufficient for the growth of wood. These vast plains of Louisiana, near the upper course of the Arkansaw, with its tributary streams, and the head waters of the Kanzas, White and Grand Ossage rivers, may become in time like the sandy deserts of Africa; "for," says Pike, "I saw in my route, in various places, tracts of many leagues, where the wind had thrown up the sand in all the fancied forms of the ocean's rolling waves, and on which not a single speck of vegetation appeared." From this circumstance Pike deduces the following just and appropriate remark: "From these immense prairies may arise a great advantage to the United States, namely, the restriction of our population to some certain limits and thereby a continuation of the Union. Our citizens being so prone to rambling, and extending themselves on the frontiers, will, through necessity, be compelled to limit their extent on the W. to the borders of the Missouri and Mississippi; while they leave the prairies, incapable of cultivation, to the wandering and uncivilized aborigines of the country." These prairies, from the borders of the Mississippi, on the E., to the base of the Mexican Alps, on the W., rise with a continually increasing acclivity for many hundred miles, till, at the base of the mountains, they attain an elevation of 8,000 feet, as we are informed by Pike, which is greater than the elevated level of the great desert of Gobi, on the N.W. of China, estimated by Du Halde to be 5,511 feet above the level of the sea, or the Karroo, or arid desert, to the N. of the cape of Good Hope, traversed by the Orange river, and lately visited by the Rev. Mr Campbell, the elevation of which is estimated by colonel Gordon at 6,561 feet above the level of the sea. In addition to the aridity of the Louisiana prairies, they are so impregnated with nitre, and other salts, as to taint the waters that flow in various directions. Pike says, that for leagues together, they are covered with saline incrustations; and a number of tributary streams descending into the Arkansaw and Kanzas rivers, are perfect salines; and beyond the river Platte, as we are informed by colonel Lewis, the lands are not only destitute of timber, but even of good water, of which there is but a small quantity in the creeks, and even that is brackish. The same saline incrustations pervade the prairies on the Upper Missouri; and the same want of timber, little or no dew, with very little rain, continues till the neighbourhood of the mountains."

plants and shrubs. The wax-myrtle appears conspicuous among many species of *azalia*, of *Kalmia*, *andromeda*, and rhododendron; here widely scattered, there collected into tufts; sometimes interlaced with the purple Russian flower; sometimes with the capricious *clitorea*, which decorates the alcoves with rich and variegated festoons. The margins of the pools and the low and moist spots are adorned with the brilliant azure flowers of the *ixia*, the golden petals of the *canna lutea*, and the tufted roses of the *hydrangea*; while an infinite variety of species of the pleasing *phlox*, the retiring and sensitive *dionea*, and the flame-coloured *amaryllis atamasco*, in those places where the tide reaches the impenetrable ranks of the royal palms, form a fanciful girdle to the woods, and mark the doubtful limits where the savanna rises into the forest.

" The calcareous districts, which form the great portion of the region W. of the Alleghanies, present certain tracts entirely divested of trees, which are called *barrens*, though capable of being rendered productive. The cause of this peculiarity has not been accurately examined. Those parts of this region which are elevated 300 or 400 feet, and lie along deeply depressed beds of rivers, are clothed with the richest forests in the world. The Ohio flows under the shade of the plane and the tulip-tree, like a canal dug in a nobleman's park; while the *lianas*, extending from tree to tree, form graceful arches of flowers and foliage over branches of the river. Passing to the S., the wild orange-tree mixes with the odoriferous and the common laurel. The straight silvery column of the papaw fig, which rises to the height of 20 feet, and is crowned with a canopy of large indented leaves, forms one of the most striking ornaments of this enchanting scene. Above all these, towers the majestic magnolia, which shoots up from that calcareous soil to the height of more than 100 feet. Its trunk, perfectly straight, is surmounted with a thick and expanded head, the pale green foliage of which affects a conical figure. From the centre of the flowery crown which terminates its branches, a flower of the purest white rises, having the form of a rose, and to which succeeds a crimson cone. This, in opening, exhibits rounded seed of the finest coral red, suspended by delicate threads six inches long. Thus, by its flowers, its fruit, and its gigantic size, the magnolia surpasses all its rivals of the forest."

Bays and Gulfs.] The coast of the United States is deeply indented with bays and gulfs. Of these the bay of *Passamaquoddy*, which is formed by the outlet of the river St Croix, the boundary between the British possessions and those of the United States, is the most northern. The bay of Penobscot lies 80 B. miles to the S. of Passamaquoddy bay.—To the S. of Penobscot bay are the bays of *Broad* and *Casco*.—*Massachusett's bay*, sometimes called *Barnstable bay*, runs southward between capes Ann and Cod, and within this bay lies the city and harbour of Boston.—*Narraganset bay* is in the state of Rhode island. It is 33 miles in length, and towards Newport, 12 miles in breadth, including islands. It receives the waters of Providence, Taunton, and Patuxent rivers, and contains five harbours, besides those of Providence and Newport.—*Long island sound* lies between Long island and the state of Connecticut, and extends the whole length of Long island; it is from 3 to 25 miles broad, and communicates with the ocean at both ends, affording a very safe and convenient inland navigation.—*Delaware bay* is a large arm of the sea, running upwards of 60 miles into the interior of the country, and dividing the state of New Jersey from that of Delaware. It is formed by the out-

let of Delaware river and other smaller streams. It is 10 leagues across in the centre, and about 7 leagues broad at the mouth, from Cape Henlope to Cape May. From the mouth of the Delaware bay, at Cape Henlopen, to Philadelphia, 118 miles distance, there is sufficient depth of water for a 74 gun ship; and above Philadelphia, the river is navigable for sloops up to the great falls of Trenton, and for boats 40 miles higher.—The great bay of the *Chesapeak* is formed by the outlet of the Susquehannah river, where it receives French creek, and a number of smaller streams. Here it is about 7 miles broad; and it continues so to near the branch that leads up to Baltimore. From thence it assumes various breadths of from 10 to 15 miles, during a course of more than 70 miles, till it approaches the mouth of the Patowmack river. Thence it stretches out in breadth to 25 or 30 miles, during a passage of 90 miles more; and finally opens into the Atlantic ocean by an outlet of 20 miles broad, between capes Charles and Henry. The extent of this bay, from the outlet of the Susquehannah to the Atlantic is 270 B. miles N. and S., dividing in its progress Virginia from Maryland, and affording many commodious harbours, and safe and easy anchorage. In addition to the waters of the Susquehannah, it receives those of the Patowmack, Rappahannock, York, and James' river, all of which are large and navigable. Besides these, it receives the rivers Patapsco and Patuxent, on the W. side, and the streams of the Elk, Sassafras, Chester, Choptank, Nanticoke, and Pocomac rivers, on the E. side. There are numerous islands in this bay, and it abounds in various kinds of fish.—*Albemarle sound* is a large inlet of the sea, extending more than 60 miles W. into North Carolina. It is from 4 to 11 miles in breadth, having several communications with the ocean, the principal of which is Roanoake. It communicates with Curretick sound on the N. and Pimlico on the S., through a track denominated the *Dismal swamp*.—The bay of *Mobile* in West Florida is 36 miles long, and of considerable breadth. At the entrance, between the eastern point of Dauphin Island and Mobile Point, it is 5 miles wide; but it soon expands to 30 miles; and again contracts to 12 at the point where it receives the Mobile river. Large vessels cannot come within seven miles of the town of Mobile. The Americans have constructed a fort at Mobile point to defend the entrance. —*Lake Borogne* is an arm of the sea running between the coast of Florida and the narrow eastern projection of the tongue of alluvial land formed by the depositations of the Mississippi. This arm extends to within 15 miles of New Orleans. There is another arm of the sea, called *Barataria*, which opens into the mainland to the W. of the Mississippi, in 29° 15′ N. lat., and communicates with two lakes, called the Lesser and the Greater Barataria, through a rich, fertile, and very flat tract, subject to annual inundations, to within 15 miles S.W. of New Orleans.—The bay of *St Louis* lies to the E. of Borogne bay, and the bay of *Perdido* 70 miles E. of Mobile bay.

Lakes.] The Lakes Superior, Huron, Erie, Ontario, and Michigan, have been already described under the article Canada. The next lake in size and importance, is *Lake Champlain*, between the states of New York and Vermont. It extends 122 miles in length, and varies in breadth from 2 to 14 miles. It contains above 60 islands of various sizes, the chief of which are *Motte island*, and the *North* and the *South Hero*. On the north, it communicates with the St Lawrence, by means of the Sorrel river. At Ticonderago, it receives the waters of *Lake George*, (formerly called the *Lake of St Sacrament*,) from the S.S.W., by a fall of 100 feet

in height. Its water is pure and transparent; generally deep enough to navigate a ship of 50 or 60 guns, and in some places from 80 to 100 fathoms. *Lake George*, with which it communicates, is 36 miles long, and from one to 7 miles broad, containing in its bosom above 200 small islets, some say, 865. The portage between these two lakes is not above a mile and a half.

There are several small lakes in the province of Maine; three of these give rise to as many branches of the Penobscot river; another is the source of the Passamaquoddy. The Kennebeck rises from three small lakes. Another lake, called the *Great Pond*, is the source of the Androscoggen. In the state of New Hampshire, is the lake of *Winnipissiogee*, 22 miles long, and 8 broad.

The state of New York contains a vast number of small lakes. There is scarcely a stream in the northern part of this state, but what has either its source in a small lake, or runs through several, in its progress, whether to the great lakes, or to Hudson's river. The chief of these lakes are *Seneca*, *Cayugo*, *Oneida*, *Onondago*, *Skeneatiles*, *Owasco*, *Canandaigua*, *Otsego*, *Caniadebago*, *Oswegatchie*, *Cross*, *Hemlock*, *Hanyaga*, *Candrus*, *Crooked*, and *Chataughque*. The latter is the most western of all these lakes, near the N.E. extremity of Lake Erie; it is only 8 miles distant from its shore, and the descent to Lake Erie, is by an easy slope. From this small lake issues one of the branches of the Alleghany river, called Conawango, which is navigable for small craft in all its extent. A number of small lakes also occur towards the source of the Mississippi, as *Turtle Lake*, *Red Cedar Lake*, *Little Winnepeg Lake*, *Leech Lake*, *Swan Lake*, *Sandy Lake*, *Muddy Lake*, *Lake Packagama*, *White Fish Lake*. A narrow belt of high land separates Turtle Lake, the most northern source of the Mississippi, from *Red river Lake*, one of the sources of the Red river which runs into Hudson's Bay. *Otter Tail Lake*, is the most southern source of Red river; and from thence is a portage of only half a mile to a branch of Raven river, which falls into the Mississippi. The whole tract of high country, at the sources of the Mississippi and Red river, is full of marshes, morasses, and small lakes, whose waters afford never failing supplies to these streams.

The *Lake of the Woods* is of a circular figure, with a cluster of islands in the centre. The navigating course through the lake, is 75 miles; but in direct distance, it is not above two-thirds of that extent in diameter. From this lake there is a long succession of small lakes, and numerous portages, to the N.W. end of Lake Superior, the chief of which is *Lake la Plue*. Two small lakes, *Lake Biddle* which gives rise to the Big Horn river, and *Lake Pusthis* which is the source of the Jaune, or Yellow Stone river, are situated amongst the Rocky mountains, in W. long. 112°, and N. lat. 42°.

In the state of Mississippi are the lakes of *Maurepas* and *Pontchartrain*. The first of these is of a circular figure, 12 feet deep, and 14 miles in diameter. In the time of high floods, it has a communication with the Mississippi, by means of the river Amité, or Ibberville; and this inundation, which lasts only four months annually, occasions what is erroneously called the island of New Orleans, to be then an island in fact, for at no other time is it environed with water, the city of New Orleans being situated on a peninsula.[a] Lake Maurepas communicates with Lake Pont-

[a] From Lake Maurepas, to Fort Bute, or Manshac, on the Mississippi, is 60 computed miles, following the course of the Amité; and Manshac is 101 miles above New

chartrain, by a stream 7 miles long, and 300 yards wide, and divided by an island extending from the lake to within a mile of Pontchartrain, into two branches, of which the southern is the safest and deepest. Lake Pontchartrain is nearly of a circular form, 40 miles in its greatest length, and 30 miles in its greatest breadth, and 18 feet deep. From this lake to the sea is 10 miles, by a passage called the *Regolets*, 400 yards wide, and lined with marshes on each side.

The Lake *Borogne*, or Blind Lake, has been mentioned already, in our account of the bays and arms of the sea. On the W. side of the Mississippi are the lakes of *Great* and *Little Barataria*. The *Catahoola Lake*, 16 miles long and 4 broad, is the source of a stream of the same name, which uniting with the Washita and Bayau Tenza rivers, form the Black river, which falls into the Red river, 26 miles above its junction with the Mississippi river. This lake, during the dry months, is covered with the most luxuriant herbage; and is then the residence of immense herds of deer, of turkeys, geese, cranes, &c. which feed on the grass and grain.

Swamps.] The alluvial tracts of the Carolinas, Georgia, and Lower Louisiana, and indeed the whole coast from New Jersey, is a succession of swamps, enlarging in extent as we proceed southward. They receive different appellations in different places: as cedar-swamps in New Jersey; rice-swamps in the Carolinas and Georgia; and cypress-swamps in the vicinity of New Orleans. The whole tract W. of the Lower Mississippi, from its junction with the Ohio, to the sea, may be considered as one vast swampy belt, of 50 miles broad. In the eastern parts of Virginia and North Carolina, there is a large tract called the *Dismal swamp*, containing 150,000 acres, which is entirely covered with trees. These trees attain a prodigious size; and among them there is often thick brushwood, so as to render the swamp impervious; while other forests in America are commonly free from underwood. In this swampy forest, bears, wolves, deer, and other wild animals abound. Some parts are so dry as to bear a horse, while some are overflowed; and others so soft that a man would sink in them. A canal has been cut through this swamp. In the mountainous parts of North and South Carolina, the marshes and swamps, especially in the hot months, send forth the most noxious effluvia, and generate fevers and agues. Georgia presents a singular marsh, or swamp, called *Ekanfanoka*, or *Owanqua-fenoga*, lying in the S.E. extremity of the state, between the rivers Oakmulgee and Flint. It is 300 miles in circumference, and contains several large and beautiful islands; one of which is represented by the Creek Indians as a kind of paradise.

RIVERS.] With the exception of the Mississippi, and its numerous branches, and the St Lawrence, all the other remarkable rivers of the United States, flow from the eastern and southern sides of the Alleghany, and may be divided into four classes. Of the 1st class are, the *Alabama* and *Flint* rivers, which descend into the gulf of Mexico, from the southern slope of the range which divides their sources from the Tennessee and its

Orleans, by the windings of the Mississippi. From Manshac to the Amité, there is a natural canal of 21 miles, navigable for vessels drawing four feet water, when the Mississippi is high; thence the Amité is navigable all the way to Maurepas and Pontchartrain Lakes, and thence to the sea. This natural canal, which is dry for ten months in the year, is very absurdly termed the river Ibberville, for in the dry months, the surface of the Mississippi is 24 feet lower than the bed of this natural canal. The river Amité itself, even from where the Ibberville joins in the inundations, is not navigable above four months annually, for the first ten miles; but three miles farther down, it has from two to six feet water; and all the remaining part of its course to Lake Maurepas, there is from two to four fathoms water.

accessory streams.—The 2d class contains those which descend from the western chain, or the proper Alleghany, and run across the eastern chain, which being seated on a bed of granite, causes them to precipitate in their passage from falls more or less high, at the foot of which they receive the tide. Such are the *Hudson, Delaware, Susquehannah, Potomac,* and *James'* rivers; to which may be added the rivers flowing from the prolongation of the two chains, as the *Connecticut* to the N., the *Roanoake* to the S., the *Cape Fear, Pedre, Santee, Savannah,* and the *Alatamaha.* The rivers of the 3d class throw themselves into the 2d, above their falls, and flow between the western and eastern chains, in the high valley of limestone. Such are the *Wallkill* and *Paulinskill* between the Hudson and Delaware, which water the valleys of New Platz and Newton; the *Lehigh* and the *Swatara,* crossing the valleys of Easton and Middletown, between the Delaware and the Susquehannah; between the Susquehannah and the Potomac are the *Conecogwinet* and *Conecochegue,* fertilizing the valleys of Carlisle and Chambersburg; and on the other side of the Potomac, the *Shenandoah,* winding along the most beautiful valley in Virginia. All the rivers of the 4th class spring from the foot of the eastern chain, have their falls near their sources, and receive the tide at the very foot of their falls. This is the reason why they have so large a volume of water below the head of the tide, and are so slender above, where they rather appear like small rivulets. Such are the *Penobscot* and *Kennebeck* in the district of Maine; the *Merrimack* in Massachusetts; the *Providence river* in Rhode island; the *Thames* in Connecticut; the *Passaik* and *Rariton* in New Jersey; the *Christiana* in the state of Delaware; the *Schuylkill* in Pennsylvania; the *Elk, Patapsco,* and *Patuxent* in Maryland; the *Rappahannock, York, Appomatox, Elizabeth,* and *Pasquetank* in Virginia; and a number of other rivers which spread their waters over the flat and sandy coasts of the two Carolinas and Georgia.

The Penobscot.] The river Penobscot is the largest in the district of Maine. It rises in the high lands separating Maine from Lower Canada. Between the junction of its two upper branches is Moose Deer Lake, 30 or 40 miles long, and 15 wide. From the *Forks,* as they are called, the Penobscot Indians pass to Canada, up either branch, principally the W., the source of which is said to be not more than 20 miles from the waters which fall into the St Lawrence. The whole navigable course of the river for sloops, is 46 miles from the head of the bay, to near the head of the tide; and from the Forks to the sea is 134 miles.

The Connecticut.] The Connecticut is the largest river of the northern, or New England States. It rises beyond the high lands which separate the states of Vermont and New Hampshire from Lower Canada. It has been surveyed to the head spring of its northern branch, about 25 miles beyond the 45th degree of latitude, from which to its mouth, it flows upwards of 300 miles, through a well-inhabited country. Its navigation is much interrupted by falls. It receives several rivers, as the *Chicapee, Deerfield, Miller's,* and *Farmington.* At Hartford it meets the tide, whence it passes on in a winding course, till it falls into Long Island sound, between Saybrook and Lyme. This river is navigable for sloops, as far as Hartford, 50 miles distant from its mouth; and the produce of the country, for 200 miles above it is brought thither in flat-bottomed boats, which are so light as to be portable in carts.

The Hudson.] The Hudson, or, according to the dialect of the Americans, the *North river,* is formed by the confluence of the *Hudson Pro-*

per and the *Mohawk*, which unite below Waterford, 10 miles above Albany. The Hudson takes its rise in the 44th degree of N. lat., from the foot of the mountains which separate the waters of the St Lawrence from those of Lake Champlain, and the Mohawk in the table-land surrounding Oneida lake. The Mohawk river rises to the N.E. of Oneida lake, about 8 miles from Sable Water, a stream of Lake Ontario. It runs first 20 miles S. to Rome; then S.E. 134 miles; and, after receiving many tributary streams in its course, falls into the Hudson by three mouths. It is a large stream of water; and is now navigable for boats from Schenectady to Rome, 104 miles distant. Prom Albany to Schenectady is a portage of 16 miles, on account of the falls and rapids, which render the river unnavigable. These falls and rapids, denominated the *cohoes*,[9] are 3 miles from the junction of the Mohawk with the Hudson. The river is 1000 feet wide at these falls; the rock over which the stream descends is 40 feet perpendicular height; and the whole height of the cataract, including the descent above, is 70 feet. Properly speaking, the North river is no other than a narrow gulf of the sea, entering inland at New York, and penetrating across the double chain of the Alleghany mountains, as far as the confluence of the above-mentioned streams, 170 miles from the sea. This is what distinguishes the Hudson from all other rivers in the United States. In no other does the tide ascend beyond the first range; but in the North river, it crosses the first chain at West Point, 60 miles N. of New York; and the second at Kaats Kill, after having burst the beds of granite which opposed its passage, and cut them into a thousand different shapes. Hence the deep valley of the Hudson has derived a most singular and magnificent aspect; the western bank being, in some places, 500 feet of perpendicular height above the level of the river. The whole course of the Hudson river is 250 miles.

The Delaware.] The Delaware issues by two streams, called the *Coquago* and the *Rappadon*, the union of which, 40 miles in a direct line from their sources, form the Delaware, from the Katskill mountains, in the county of Delaware, state of New York. Running first S. it next turns to the S.E. forming, for the space of 60 miles, the boundary between Pennsylvania and New York; and thence, forms again the line of separation between the former state and that of New Jersey, for upwards of 100 miles more to Trenton, where there are falls, but of no great height. Thence, with increased breadth, it pursues a course of 36 miles farther, to Philadelphia, where it is a mile broad. Thence it proceeds to Newcastle, 40 miles below Philadelphia, where it is two miles broad. Thence it spreads out into a spacious bay, and falls into the Atlantic, 70 miles below Newcastle, by an outlet of 25 miles. The whole course of the river, from the Atlantic to its source, is 350 miles; and 280 from the head of Delaware bay, including the windings. Its two chief tributary streams are the *Lehigh* and *Schuylkill*. The navigation betwixt the Delaware and Chesapeak is now improving by means of a canal.

The Susquehannah.] The river Susquehannah, of all those of the eastern states, most resembles the Mississippi and the St Lawrence, on account of its numerous and distant branches. The N.E. branch, which is the remotest source, is formed by the junction of two small streams that issue from the lakes of Caniadebago, Ustavantho, and Otsego, in the state of New York. It runs S. and S.W. in such a winding course, (receiving

[9] The term is derived from the savages; and what is singular, the same word is applied in the county of Liege to a little cascade, eight miles distant from Spa.

in its progress the *Unandilla* and *Chinango* rivers from the N.,) that it crosses the boundary line between New York and Pennsylvania no less than three times. It forms a junction with the *Tyoga*, in 41° 57′ N. lat.; and thence pursues a S.E. course of 70 miles to Wyoming; whence making a sudden bend at a right angle, it runs a S.W. course of 80 miles, and unites with the W. branch at Northumberland. The river, now increased to the breadth of half a mile, flows S. through the mountains, a course of 40 miles, to its junction with the *Juniata*, when turning to the E. for 10 miles, it emerges from the mountains above Harrisburg, and after a S.E. course of 80 miles, falls into Chesapeak bay. The western branch of the Susquehannah is formed by many streams, beyond the Alleghany mountains; and its most southern source is within a very few miles of the *Conemaugh*, or *Kishkeminitas*, which falls into the Alleghany a little above Pittsburg. After running a very winding course of 200 miles, principally among the mountains, it joins with the E. branch at Northumberland. The *Juniata* rises in the Alleghany mountains, and, pursuing an eastern and very serpentine and mountainous course, falls into the Susquehannah, after running 200 miles. The whole course of the Susquehannah, from Chesapeak bay to the head of the N.E. branch, is 450 miles; and, including all its branches, it waters a tract of 40,000 square miles. Where it falls into the sea it is fully a mile broad; at Harrisburg it is nearly of the same breadth, and from 3 to 5 feet deep. There are 7 falls in this river, which, with the numerous islands and rocks, render it navigable only for a few miles by large vessels.

The Patowmack.] The river Patowmack rises on the N.W. side of the Alleghany mountains; and after running a N.E. course of 60 miles to Cumberland, is joined, 18 miles below, by a branch coming from the S.W. Thence, 54 miles farther, it receives the waters of *Licking Creek*, and passes the North mountain into a fine limestone valley, which it waters in a very winding course of 45 miles in a S.E. direction. Here it receives a considerable number of tributary streams, particularly the *Conecocheague* at Williamsport, and the *Shenandoah* at the extremity of the valley, and just above the Blue ridge, through which the combined stream has effected a singularly magnificent passage. About 30 miles farther, it descends 140 feet in the course of eight or ten miles, to the level of tide-water, which it meets at Georgetown. It is here a quarter of a mile wide; but expands to a mile opposite Washington, and enters the Chesapeak bay by a passage 7½ miles broad. This is one of the most important of the Atlantic rivers. It is navigable for vessels of any burden to Alexandria, 100 miles distant; and from thence, for ships of considerable burden, to Georgetown. A lock navigation has been constructed round the first falls, of which there are 4 in whole. The largest of these falls is at Matilda, 6 miles above Georgetown, where the stream, 900 feet broad, after flowing through a valley skirted with hills wild as those of the Rhone in Vivarais, (says Volney,) falls at once, like the Niagara, from the height of 77 feet, into a deep chasm of solid micaceous granite. From this it escapes, several miles farther down, by a widening of the valley in the lower country. The whole course of the Patowmack is 340 miles.

York river.] York river is formed by the junction of the *Mattapony* and *Pamunky*. Beyond the junction, the Mattapony is navigable for 70 miles; and 30 miles higher up is its source in the Blue mountains. The Pamunky is formed by the junction of the *North* and *South Anna* rivers, which rise in the N.W. about 50 miles distant. The mouth of this river

is 3 miles wide; and at high tide there is 4 fathoms water, 25 miles above Yorktown, where it is a mile and a half wide in the wet season, but has a channel of only 75 fathoms in the dry season.

James' river.] James' river is one of the most important rivers in the state of Virginia. It rises in the Alleghany mountains, near 200 miles to the W. of Richmond; and, after widening and contracting alternately in a very winding course, it enters Chesapeak bay 15 miles W. of Cape Henry: its whole length being 300 miles. Its principal tributary streams are the *Rivannah*, the *Appomatox*, the *Chickahomany*, the *Nansemond*, and the *Elizabeth*, on which last is situated the town of Norfolk. This river, anciently called the *Powhattan*, affords harbour for vessels of any burden, in Hampton road, 70 miles below Richmond. Vessels of 250 tons may go up to Warwick; and those of 125, to within a mile of Richmond.

The Roanoake.] The Roanoake is formed by the junction of the *Dan* and *Staunton.* It runs 125 miles S.E. till it enters Albemarle sound. Its whole course is 200 miles. It is navigable by sloops 60 miles; the low lands on the banks are subjected to annual inundations.

Cape Fear river.] Cape Fear river is the largest in North Carolina. It rises 100 miles above Fayetteville; and thence running 200 miles eastwards, falls into the Atlantic ocean at Cape Fear, where it is 3 miles wide, and 18 feet deep at high tide. It is navigable by vessels drawing 10 feet water, up to Wilmington, a little below the confluence of its two principal streams.

The Great Pedee river.] The Great Pedee river rises in the Blue mountains, on the borders of North Carolina and Virginia, where it has the name of *Yadkin river.* Its whole course is upwards of 300 miles, half of which is in North Carolina. It is navigable by ships to Georgetown; and for smaller vessels, 100 miles higher up.

The Santee.] The Santee is the largest river in the state of South Carolina, and is formed by the junction of the *Congaree* and *Wateree* rivers. The whole course of the Santee, including that of the Catawbaw or Wateree, is 350 miles. It is navigable up to the point of junction by ships of burden.

The Savannah.] The Savannah river, which forms the boundary between South Carolina and Georgia, is a bold and deep stream, and is formed by the junction of the *Keowee* and *Tugeloo*, (two small streams issuing from the Blue ridge,) 220 miles from the sea. It runs in a straight S.E. course all the way to its mouth, 17 miles below Savannah. It is navigable for ships of any burden to within 3 miles of Savannah; for vessels of 250 tons to Savannah; and for boats of 100 feet keel, to Augusta, above which the rapids commence; after passing them, the river can be navigated in small boats, 80 miles higher, to the junction of the tributary rivers.

The Alatamaha.] The Alatamaha is a large navigable stream, formed by the junction of two nearly equal branches, 100 miles from its mouth, called the *Oakmulgee* and *Oconee.* Both of these branches rise near the mountains, and run separate courses of 200 miles each, to their junction. The mouth of the Alatamaha is 60 miles S.W. of Savannah, and is navigable for large vessels up to Darien.

The Chatahoochee.] The Chatahoochee is a very large stream, and forms the western boundary of Georgia, from the Florida line, 125 miles up the country. It rises very near the source of the Tugeloo, and after running 200 miles S.W., forms the state-boundary. Thence it runs a lit-

the E. of S. to Florida, where it forms a junction with the Flint river, and, 80 miles below, enters the gulf of Mexico by several mouths. After its junction with the Flint, it is termed the *Appalachicola*. Its whole course, including meanderings, is 400 miles.—West of the Appalachicola, are the *Choctaw*, *Yellow Water*, *Conecuh*, and *Rio Perdido* streams.

The Mobile.] The river Mobile is formed by the junction of the *Tombecbe* and *Alabama*, 40 miles above the town of Mobile. The Alabama has its source in Georgia, on the frontiers of Tennessee. Its highest branch is called the *Estenaury*. After a course of nearly 100 miles, the Estenaury receives the *Hiowee* from the N.E., a stream of equal length and size. The united stream now takes the name of the *Coosee;* and, under that appellation, it runs for a course of 150 miles S.W., and receives the waters of the *Tallapoosee*. After this junction, the river is called the Alabama, and runs 120 miles farther to the S.W. till it meets the Tombecbe, at Fort Stoddart, after running, in whole, a course of 370 miles. The Tombecbe is navigable with sloops to Fort Stephen's; and beyond that for smaller vessels, to within 50 miles of Bear Creek, a navigable branch of the Tennessee. The Alabama is stated to be a most beautiful river, with a clear gentle current, flowing at the rate of 2 miles an hour, from 300 to 400 yards broad, and from 15 to 18 feet deep in the driest seasons.

The Pearl river.] The Pearl river is the most western of West Florida. It rises in the Mississippi territory, about the 33d degree of N. lat.; and after pursuing a southern course of 200 miles, falls into Lake Borogne, or Blind Lake, a little east of Lake Pontchartrain. It is represented as navigable for 150 miles. It has only 7 feet water at the mouth, but deepens considerably as it is ascended; the navigation is at present impeded by sunk logs, deposited it is probable in the time of high floods.

The Genessee.] The Genessee rises within a few miles of the remotest source of the Alleghany, in the state of Pennsylvania. It receives a number of tributary streams from several lakes lying to the S.E.; and after having run 100 miles from north to south, it falls into Lake Ontario. It is a large and muddy stream, and is celebrated for its falls,[8] two of which taken together equal in height those of Niagara.

[8] Travellers and geographers are by no means agreed as to the number of these falls. Arrowsmith, in his map of North America, assigns but two falls to the Genessee, making the first 96 feet, and that nearest the lake 75 feet in height; or together 171 feet, which is exactly the height of Niagara cataract. According to Volney, there are three falls; and he makes the first of these three falls 64 feet high, and the river 470 feet broad; the second fall very inconsiderable; and the third, where the stream is 700 feet broad, 107 feet high. Bougainville says that the second fall is 21 feet in height, which would make a total of 192 feet. But a later traveller than either Volney, Pouchot, or Bougainville, namely, Mr Mellish, assigns four large falls to the Genessee; two of these, 60 miles S. of the lake, precipitate the water 90 and 60 feet, or together 150 feet; and two more, on the continuation of the ridge from Lewistown, six miles from the lake, throw it down 75 and 96 feet, or together 171 feet; being in all 321 feet. From this, it appears that the level of the table-land falls one-half, 50 miles from Lake Ontario. The following table will show both the elevation of Lake Erie above the level of Lake Ontario, and the degree of descent of the Niagara from the former to the latter:

	Feet.
From Lake Erie to Chippaway,	16
From Chippaway, to the head of the rapids, one mile,	50
The descent in the rapids, half a mile long,	58
The grand pitch at the Table Rock,	172
From the grand pitch to Devil's Hole,	110
From Devil's Hole to Lewistown,	56
From Lewistown to Lake Ontario,	6
Total	468

The Missouri.] Of all the rivers, not merely of the United States, but of the whole continent of North America, the Missouri is the chief, whether we regard the continuity of its course, the velocity of its current, the immense volume of its waters, the number and magnitude of its tributary streams, the vast extent of its inland navigation, or the broad expanse of its periodical floods. For length of course, it is only excelled (as far as our geographical knowledge extends) by the Maranon of South America. In velocity of current, it greatly exceeds the Maranon, and the Hoanho of Northern China, which last it also resembles, in the yellowish tinge of its waters. For the vast extent of its inland navigation, and extent of surface drained by its streams, it is only excelled by the Maranon. The Missouri was first discovered by Hernand Soto, in 1540. It was observed also by colonel Wood, in 1654; and by captain Bolt, in 1670; so that Monsieur La Salle, who sailed up this stream in 1682, has no such right to the honour of its first discovery as father Hennepin maintains. In 1698, Dr Cox of New Jersey ascended the river as far as the Detour Des Anglois, near New Orleans, and called the adjacent country New Carolina. From the days of father Hennepin, this mighty river has been called the *Mississippi*—or *Mechasipi* as it was always spelled by that father—a term derived from the savages of the Illinois, and signifying in their language 'the Great river.' Du Pratz, in his history of Louisiana, says, that the word *Mississippi* is a contraction of the savage appellation *Meactchasipi*, which literally denotes 'the ancient father of rivers.' In the history of the adventures of Hernand Soto and his Spanish companions, when they explored this country in 1541, the Mississippi is termed the *Rio Grande*. But while, in point of fact, this river has been hitherto denominated the Mississippi, it ought, in point of right, to be called the *Missouri*. It was known long before the voyages of Clarke and Lewis, that the Missouri was the largest and longest stream; and like the Maranon, the St Lawrence, the Hoanho, and the Bahr el Abiad, the Missouri is a white, or rather yellowish muddy stream,—while, like the Rio Negro which falls into the Maranon, or the Abyssinian Nile which falls into the Bahr el Abiad, the Mississippi is a clear and transparent stream. At the confluence of these two streams, the Missouri rushes triumphantly across the Mississippi, its turbid waters seeming to disdain a connexion so inferior. In fact, from the junction down to the sea, the muddy waters of the Missouri completely discolour the stream; and every peculiar characteristic of the Mississippi, as a distinct river, is lost in the majestic volume of the Missouri. Therefore, in classifying the numerous streams composing that immense mass of waters, which, below New Orleans, discharges itself into the gulf of Mexico, we shall assign the first rank to the Missouri; the *Mississippi*, the *Ohio*, the *Arkansaw*, and *Red river*, being considered as four great subordinate branches.

On account of the extreme flatness of the coast, and the many openings made by inlets, lakes, and marshes, it was long very difficult to discover the mouth of the Missouri river; and it would be equally difficult still, were it not for the houses at the Old and New Balize, and the flag-staff at the former, which are discernible some distance at sea.

From this, it appears that Lake Erie is situated on a high level, being 408 feet higher than Lake Ontario. This high table-land continues on both banks of the river, to within a mile of Lewistown and Queenstown, where there is a sudden descent of 300 feet and upwards, towards Lake Ontario.

The white clayey colour of the river-water remaining unmixed on the surface for many miles out at sea, is another indication that the Missouri is not far distant. The principal stream is divided, for a few miles above its mouth, into four channels, each of which is called a *pass*, and has a sand-bar at its entrance. These sand-bars are subject to continual shiftings on account of the rapidity of the current, its change of direction, and the constant accumulation of alluvial matter. Their distance from the entrance of the river—which is generally about 2 miles—depends much on the winds being accidentally with or against the tides. When these bars have accumulated sufficiently to resist the tides and the current of the river, they form numerous small islands, which, constantly increasing, join to each other, and at last reach the continent.

From the point where the Missouri receives the Mississippi, in 38° 55′ N. lat. and 89° 57′ W. long. to the Balize, it has 1300 miles to run, ere it reaches the gulf of Mexico. The city of New Orleans, in 29° 57′, being within four minutes of the same parallel of longitude with the junction of the two rivers, the bearing between these two points is almost due north and south, 622 British miles of direct distance, and 1,194 by water. Within this space, the point where it receives the Ohio, is the most eastern, being in 88° 40′ W. long. and 36° 57′ N. lat.; or 1° 17′ and 1° 58′ S. of the junction of the Missouri and Mississippi, and 186 miles S.E. by water. From this last point, the river assumes a S.W. course, till it receives the Arkansaw, in 91° 10′ W. long. and 33° 45′ N. lat. For 411 miles by water, farther down the stream, to the point where the Red river enters the Missouri, in 91° 33′ W. long., and 31° 1′ 15″ N. lat., the course is almost due south. Thence the remainder of the course is 336 miles S.E. as far as the English turn, 18 miles below New Orleans; and thence it is pretty straight to the sea. Besides the Red river, the Arkansaw, Ohio, and Mississippi, which the Missouri has received within the above space of 1,300 miles, it also receives many other streams. Among these is the *White River*, which falls in from the W. after a course of 600 miles, and 22 miles above the mouth of the Arkansaw. The river *St Francis*, after a S.E. course of 350 British miles, joins the Missouri by a mouth, 200 yards wide, in 34° 45′ N. lat., 111 miles above the outlet of the Arkansaw. The *Marameg*, after running 150 miles N.E., falls into the Missouri below St Louis. It is a large stream, 200 yards broad, and famous for the lead-mines on its banks, which being believed to be silver, gave rise to the famous Mississippi scheme, in France, in 1720. The *Homochitto*, *Big Black*, *Yazoo*, *Wolf*, *Hatchee*, *Obion*, *Forked Deer*, *Reelfoot*, and other minor streams, fall in on the east side.

The whole course of this river, from it mouth in the gulf of Mexico, is 4,424 miles, including its windings; and its comparative course cannot be less than 2,500 miles. The whole navigable course is 4,396 miles. From the point where the Missouri receives the Mississippi, to Fort Mandan, is 1,609 miles by water; to the foot of the rapids at the Great Falls, 2,575 miles; 2,664, to where it issues from the mountains; 2,690, to the Gates of the Mountains; 2,848, to the Forks of the Missouri; 3,096, to the extreme navigable point of Jefferson River; and 3,124 miles to its remotest source, in N. lat. 43° 30′, and 112° 30′ W. long. In this immense course it receives upwards of 50 large rivers, and 150 smaller streams.—The *Gaskinade* is 157 yards wide, and 19 feet deep, where it falls into the Missouri, 100 miles above the confluence of the latter with the Mississippi. It runs 150 miles, from S.W. to N.E.—Thirty-three

miles higher up, the Missouri receives the *Great Osage river*, after running 300 miles from S.W. to N.E.—About half-way between the Osage and the Kanzas, the Missouri receives the *Grand river*, 100 yards wide at the entrance, near a rich and delightful plain.—In long. 94°, and N. lat. 38° 31′ 11″, is the mouth of the *Kanzas*, 342 yards wide, which runs a course of 500 miles, from S.W. to N.E.—At the distance of 287 miles higher up, the great and rapid river *Platte* falls into the Missouri. This river is in fact much more rapid than the Missouri, and drives the current on the northern shore, on which it is constantly encroaching. At some distance below the confluence, the Missouri is two miles wide, with a rapid current of ten miles an hour in some parts, the rapidity increasing as we approach the mouth of the Platte; the velocity of which, combined with the vast quantity of rolling sands which are drifting from it into the Missouri, renders it completely unnavigable, unless for flats or rafts, though the Indians pass it in small flat canoes made of hides, and the Americans have contrived to navigate it by means of keel-boats, which being constructed to draw but little water, and built upon a small keel, are remarkably well-adapted for sailing up rapid and shallow streams. The Platte runs a course of 15 degrees of longitude, from W. to E., or more than 800 miles.—About 1,026 miles up the Missouri, is the entrance of *Rapid river*, which is so rapid and full of moving sands, as to be unnavigable through its whole course of 300 miles from W. to E.—Still higher up is the *White river*, 300 yards broad, and navigable to a great distance. One hundred and eighty miles above the White river, and 1,260 up the Missouri, the *Chyanne* falls in from the S.W. It is 400 yards broad, and navigable to the Black mountains, where it rises in the third range.—At Fort Mandan, in 99° 24′ 56″ W. long. and 47° 21′ 47″ N. lat., the Missouri is 500 yards broad. Ninety-two miles beyond Fort Mandan, and 1,700 miles up the river, the *Little Missouri* enters, which, in colour, current, and taste, exactly resembles the Missouri. It rises in the Black mountains, and runs more than 240 miles from S. to N. in direct distance: but its velocity and numerous sand-bars, and comparative shallowness—being only 2½ feet deep—render its navigation impossible but for light canoes, unless in the wet seasons when the river is high.—Two hundred and seventy-eight miles beyond Fort Mandan, and 1,888 miles up the river, is the mouth of the *Jaune* or *Yellow Stone*. Here the Missouri is deep and rapid; having 337 yards of water, and 190 of a sand beach. The course of the Jaune is from S.W. to N.E. It is large and navigable for 837 miles, to the Snowy mountains, there being none of the moving sand-bars which impede the navigation of the Missouri. It receives the *Bighorn river*, which rises from Lake Riddle, a little to the N. of the source of the Platte river; winds through the eastern range of the Rocky mountains; pierces the black mountains; and, after a winding course of 500 miles, falls into the Jaune. At the junction, both rivers are 220 yards wide; but the Jaune contains much more water, being from ten to twelve feet deep; while the depth of the Bighorn varies from five to seven feet—*White Earth river*, which flows from the N. into the Missouri, is a deep and rapid stream, 60 yards wide. The source of this river is near the Saskatchewine, and consequently beyond the 50th degree of N. lat.; and the point of entrance may be regarded as the most northern bend of the Missouri, being in 48° 20′ of N. lat., and 226 miles, by the course of the river, N.W. of Fort Mandan.—In 110° W. long. and 47° 25′ N. lat. is the junction of the Missouri and *Maria*; the former being 372 yards

wide, and six feet deep, and the latter, 186 yards wide, and five feet deep. Here the Missouri is perfectly transparent, and the current rapid with a smooth and unruffled surface; while the waters of Maria river, are of a whitish brown colour, thick and turbid, and running in the same boiling and rolling manner as the Missouri in the greater part of its course. The Maria runs from N.W. to S.E. It is a large volume of water, being in reality much larger nearer its source than at its entrance into the Missouri, as a great portion of its waters, among these high and parched plains, is evaporated and absorbed by the thirsty earth.

In 46° 46′ 50″ N. lat., and 60 geographical miles S.W. of the Great Falls, in direct distance, commences the great range of the Rocky mountains. From this point to its remotest source, the Missouri rolls its majestic stream 456 miles through the country intersected by these lofty ranges. Before entering the mountainous region, several dangerous rapids must be passed. For several miles below the rapids, the current gradually increases in rapidity, and the spurs of the mountain advance towards the river, which is more than 70 yards wide, and very deep. At the rapids, the river is closely hemmed in on both sides by the hills, and foams for half a mile over the opposing rocks. The general direction of these hills is from N.W. to S.E., and the cliffs themselves are 800 feet perpendicular height above the surface of the river; they are of hard black granite, through which the river seems, in the progress of time, to have worn its channel. About 47 miles below the spot where the Missouri issues from the mountains to the plains, a most sublime and extraordinary spectacle presents itself, emphatically denominated the *Gates of the Rocky mountains*. In ascending the stream, it increases in rapidity, depth, and breadth, to the mouth of this formidable pass. Here the rocks approach it on both sides, rising perpendicularly from the edge of the water to the height of 1,200 feet. Near the base they are composed of black granite; but above, the colour is of a yellowish, brown, and cream colour. Nothing can be imagined more tremendous than the frowning darkness of these rocks, which project over the river, and menace the passenger with instant destruction. For the space of five miles and three quarters, the rocks rise to the above degree of elevation, and the river, 350 yards broad, seems to have forced its channel down the solid mass: or, to use Volney's expression respecting the Falls of Niagara, literally to have sawed a passage through this body of hard and solid rock, near six miles in length, being incased as it were during all this distance, between two walls of 1,200 feet high. During the whole distance the water is very deep, even at the edges; and for the first three miles, there is not a spot, except one of a few yards, in which a man could stand between the water and the towering perpendicular precipice of the mountain. Above the Gates, the perpendicular rocks cease, the hills retire from the river, and the valley suddenly widens to a considerable extent; and if we can admit the supposition that the river has gradually pierced the rock, this must have been formerly the bed of a lake which once contained the obstructed waters of the Missouri. The river now spreads out to more than a mile wide, but being much shallower, admits the use of the setting pole. Here are a prodigious number of beaver-dams. Soon after this, the Missouri is divided into three branches of nearly equal size, or *forks*, as they are denominated in the American nomenclature. These forks are 180 miles, by the course of the stream, beyond the entrance of the mountains, and 269 miles beyond the rapids at the foot of the Great Falls, in N. lat. 45° 2? 8″. Here the

American explorers were seized with an odd revolutionary fit, and ungratefully decreed to depose this grand monarch of streams by whose favour they had been enabled to advance a distance of nearly 3,000 miles. The deposition of this venerable personage was followed by a whimsical oligarchy, under the names of Gallatin, Madison, Philosophy, Philanthropy, Wisdom, and, at the head of them, Jefferson, the name now imposed on that branch on which they decided to follow up their discoveries, and which, in all reason and royalty, ought to have been still called the Missouri. Thus this ill-fated stream has been twice deprived of its name and legitimate honours: first, by Father Hennepin, who transferred them to the Mississippi, which sinks into comparative insignificance, when compared with this mighty river,—and lastly, by Lewis and Clarke, who deprived it of its very name. Of these three branches, the *Gallatin*, coming from the S.E. is 70 yards wide, and is the most rapid of the three. The *Madison* and *Jefferson* branches are each 90 yards wide; the former being the middle fork, and coming from the S., and the latter from the S.W. The Jefferson is six feet deep, and from 90 to 120 yards wide. The whole of these streams run with great velocity, throwing out large volumes of water. All their beds are formed of smooth pebble and gravel, and their waters are perfectly transparent. One hundred and a half miles beyond the forks of the Missouri, are the forks of Jefferson river, in N. lat. 45° 2'. The two subordinate brancnes of this stream are *Wisdom* and *Philanthropy;* the latter coming from the N.W. and the former from the S.E. Philanthropy river is 20 yards wide, with a gentle current and gravelly bottom. Wisdom river is 50 yards wide, cold, rapid, and containing a third more water than the Jefferson; it seems to be the drain of the melting snows on the mountains, but is unnavigable on account of its rapidity. One hundred and forty-eight miles farther up, is the extreme navigable point of the river, in N. lat. 43° 30' 2", and 112½° W. long.[9]

The Great Falls of the Missouri are the grandest in all North America, those of Niagara excepted, and although the latter exceed the former with respect to volume of water, depth of descent, and awful grandeur, yet the former are far more diversified and beautiful. These falls are within 60 geographical miles of the eastermost range of the Rocky mountains.[10]

[9] "Two miles beyond this, is a small gap or narrow entrance, formed by the high mountains, which recede on each side, at the head of an elevated valley, ten miles long and five broad, so as to form a beautiful cove several miles in diameter. Up this gap is the Indian road to the W. From the foot of one of the lowest of these mountains, which rises with a gentle ascent of half a mile, issues the remotest water of the Missouri. Captain Lewis's party ascended towards the W. by the Indian path, till they reached a high ridge, which formed the dividing line between the waters of the Pacific and the Atlantic. Here the cold was intense, though it was the latter end of August. This is not to be wondered at, if we consider the elevation of the spot. They had ascended a very rapid river for more than 3,000 miles; and the extreme navigable point cannot be estimated at a lower elevation than 6,000 feet. Nay, the prairie at the foot of the Great White mountain, on the banks of the Arkansaw, is estimated by Captain Pike, at 8,000 feet high; and, as the velocity of the Missouri is much greater, and the acclivity much more considerable, there is reason to think that the elevation near its source is equally great. However, we are told, that at the source, on the 21st of August, the weather was so cold, that the water which stood in vessels exposed in the air was frozen to the depth of one-fourth of an inch during the course of the night; the ink froze in the pen; and the low grounds were white with hoar frost, though the day afterwards proved extremely warm.

[10] "Whilst Captain Lewis was engaged, with four of his men, in exploring the Missouri from its junction with Maria's river, in a S.W. direction, he had not proceeded many miles till his ears were agreeably saluted with the sound of a fall of water. As he advanced, a spray which seemed driven by the high S.W. wind, arose above the plain, like a column of smoke, and vanished in an instant. Towards this point he directed his steps; and having travelled 7 miles after first hearing the sound, he reached the falls about

Three remarkable peculiarities distinguish the Missouri from all other North American rivers: namely, its velocity,—the sinuosity of its course,—and the vast number of islands and sand-bars in its bed. Nothing can be more discordant than the accounts given by travellers respecting the first particular, as far as regards the course of the stream below the confluence with the Mississippi: while some have represented the current as rapid and strong, others have affirmed that it is gentle and slow. These differences evidently arise from the different seasons at which travellers have made their observations. The motion of the stream is much slower in the dry season, than at the time of its periodical floods. While some will have its mean motion in the dry season to be two miles, and others little more than a mile per hour, others again, make the mean rate to be from 3½ to 4 miles an hour, during the dry season. We rather incline to believe the last statement, as it is admitted on all hands, that however the motion of the stream be accelerated during the inundations, which commence in March and subside in July, yet the uniform rapidity of the current is so great, that there is no tide in the river, and ships cannot ascend higher than New Orleans, the velocity increasing as it is ascended. The reason

mid-day. The hills as he approached were difficult of access, and 200 feet high. Down these he hurried with impatience, and, seating himself on some rocks under the centre of the falls, enjoyed the sublime spectacle of this stupendous cataract, which since the creation had been lavishing its magnificence on the desert, unknown to civilization. Here the river, 280 yards, or 840 feet wide, is pressed in by a perpendicular cliff on the left, 100 feet high, and extending for a mile up the river; on the right, the bluff, or high steep bank, is also perpendicular for 300 yards above the falls. For 90 or 100 yards from the left cliff, the water falls in one smooth even sheet over a precipice of 87 feet 8 inches, according to captain Lewis; but 98 feet, according to Gass and captain Clarke. The remaining part of the river precipitates itself with a more rapid current; but being received as it falls by the irregular and projecting rocks below, forms a splendid prospect of perfectly white foam, 200 yards in length, and 80 in perpendicular elevation. This spray is dissipated into a thousand different shapes; sometimes flying up in columns of 15 or 20 feet, which are then oppressed by larger masses of the white foam, on all which the sun impresses the brightest colours of the rainbow. As it rises from the fall, it beats with fury against a ledge of rocks extending across the river, at 150 yards from the precipice. From the perpendicular cliff on the north, to the distance of 120 yards, the rocks rise only a few feet above the surface of the water; and when the river is high, the stream finds a passage across them; but between the southern extremity of this ledge and the perpendicular cliff on the S., the whole body of water runs with great rapidity. At the distance of 300 yards is a second abutment of solid perpendicular rock, 60 feet high, projecting at right angles from the small plain on the N. for 134 yards into the river. Below this, the Missouri regains its usual breadth of 300 yards, but there is a continued succession of rapids and cascades. At the second grand fall, the river, 400 yards wide, precipitates itself, for the space of 300 yards, to a depth of 19 feet perpendicular, and so irregularly, that captain Lewis termed it the *crooked fall*. Above this fall the Missouri bends suddenly to the northward, and where, 473 yards wide, it is suddenly stopped by one shelving rock, which without a single niche, and with an edge as straight and regular as if it had been formed by art, stretches itself across from one side of the river to the other. Over this the Missouri precipitates itself in one even, uninterrupted sheet, of 473 yards broad, to the perpendicular depth of 47 feet 8 inches; whence, dashing against the rocky bottom, it rushes rapidly down, leaving behind it a spray of the purest foam across the river. At the distance of less than half a mile, another of a similar kind is presented. Here a cascade stretches across the whole river, for a quarter of a mile, with a descent of 14 feet 7 inches, though the perpendicular pitch is only 6 feet 7 inches. For the space of 1177 yards above this cascade the river descends 15 feet. Immediately above this, one of the largest springs in America falls into the river. Its water is cold, of the most perfect clearness, and of a bluish colour, which it preserves even for half a mile after falling into the Missouri, notwithstanding its rapidity. This fountain rises in the plain, 25 yards from the river, on the S. side. In its course to the river, it falls over some steep irregular rocks, with a sudden descent of eight feet perpendicular, in one part of its progress. The water boils up from among the rocks, and with such force near the centre that the surface seems higher than the earth on the sides of the fountain, which is a handsome turf of green grass. The water is pleasant to the taste, not being impregnated with lime or any adventitious substance. For the space of a mile and 1166 yards above the mouth of this spring, the descent of the river is 13 feet 6 inches.

of this is plain: below the confluence of the Red river commences the delta of the Missouri, where it branches off in different directions to the sea. The river continually sending off new branches as it approaches the sea, the delta is proportionably increasing in size as the main stream is diminishing in volume, strength, and rapidity. Above the head or apex of the delta, 3 miles below the mouth of the Red river, the whole of the confluent waters being united in one channel, the strength and velocity of the current are consequently much greater than below.[10] From the confluence of the Missouri with the Mississippi, as far as the mouth of the Kanzas, a distance of 334 miles, the velocity is from 5 to 7 miles an hour. From this to the mouth of the Platte, it is 6 miles an hour; and a little below the mouth of that river, 10 miles during the same space of time. This is a velocity very far beyond what we are accustomed to observe in rivers in our part of the world; and in a river much less in volume than it afterwards becomes, and not very deep,—obstructed by shoals, and rolling vast quantities of moving sands along its bosom,—such a velocity denotes a very great acclivity.[11] Beyond the mouth of the Platte, the velocity is somewhat diminished; and beyond Fort Mandan it does not exceed 4½ miles, till after the junction of the Jaune, when the velocity is increased till we come to the falls. Beyond the falls the current is comparatively gentle to the mountains, when its velocity, as might be expected, is similar to that of other mountain-streams.

The second peculiarity of the Missouri is the vast quantity of sand carried down by the stream, and all the rivers that run into it above the confluence. To this the great sinuosity of the Missouri must be owing, as well as to the force and velocity of the current.[12] Not only are great

[10] As a proof that velocity of current depends as much, or even more, upon quantity of volume than on degree of declivity, it may be remarked that the degree of descent is comparatively small in the great valley of the Missouri, from the junction of the Missouri and Mississipi, to the sea; and that in the periodical floods, when the volume of water is at least three times more than in the dry season, the velocity is accelerated in proportion,—the motion being increased threefold according to Hutchins, or at least double according to others, though on the very same degree of declivity. It is then to the impetus or propelling force, originating at the place where adventitious waters are poured in, and successively communicated to every part of the stream, that we are principally to attribute the increase of velocity, which is greater or less according to the quantity poured in; and, on the other hand, where the waters are continually draining off as they approach the sea, by the increasing number of new channels, the velocity and strength are gradually diminishing; which irrefragably confirms our position that the velocity increases as we ascend, till we arrive above the head of the delta, where all the waters are collected into one stream.

[11] It is to be regretted that the American explorers have not informed us more particularly of the depth and velocity of this river. If they had been careful now and then—from week to week for instance—to inform us of the average velocity and depth of the river, together with its breadth; even though this last had not been very correctly given, the general declivity on which the Missouri runs, and of course the elevation above the confluence that belongs to it in any part of its course, might have been pretty correctly ascertained. The velocity of a river joined to its section, or its breadth and depth, but especially the latter, affords the means of determining its declivity; and becomes a method of levelling, to which, in the absence of a barometer, recourse may be often had with great advantage.

[12] One day, when captains Lewis and Clarke stopped to take a meridian altitude, they found themselves so near the spot where they had made their observations the day before, that they sent a man to step the distance over the narrow neck of land, which separated the two stations: he found it to be 974 yards, while the distance by the river was 18¾ miles. At a place called the Great Bend, the winding of the river was still more remarkable. The distance across the neck was 2000 yards, while the circuit by the river was 30 miles. This very remarkable spot is in 43° N. lat. We doubt if that classical stream, the famed Meander itself, could produce any sinuosity so great. Sometimes, by the continued action of the stream on the loose soil, the narrow necks or isthmuses of these circular bends are cut through, and a change of channel consequently effected. In one part of its course, the Missouri was seen evidently to have changed

quantities of rolling sand coming down, and forming shifting sand-bars, but the banks also being continually undermined by the direction and violence of the current, are constantly falling into the river, and the bed always changing. The very same thing takes place below the confluence of the river with the Mississippi. "This great, this magnificent Mississippi, (Missouri,) held out as a land of promise,—says Volney,—is a very bad neighbour. Strong in a body of yellowish muddy water, 2000 or 3000 yards broad, which it annually rolls to the height of 25 feet over its banks, it urges this immense mass of loose sand and clay; forms islands and destroys them; floats along trees, which it afterwards overturns; varies its course through the obstructions it creates for itself, and at length reaches you at a distance where you would have supposed yourself perfectly safe; similar in this to most of the grand agents of nature; as volcanoes, hurricanes, &c. which are no doubt sublime, but which prudence counsels to admire at a distance." Not only is the river full of sand-bars, continually shifting their position, but the bottom of the stream is also full of sunk logs; and vast quantities of drifted timber are carried down the stream, especially in the high floods. One tree, if stopped by its roots or branches in a shallow part, is sufficient to stop the passage of thousands more, and to fix them in the same place, no human force being able to remove them, while the mud carried down by the river serves to bind and cement them together. They are then gradually covered, and every inundation not only extends their length and breadth, but adds another layer to their height; and in less than 10 years' time, canes and shrubs grow on them, and form points and islands, which forcibly shift the bed of the river. The sunk logs in the bottom of the channels are likewise very dangerous to vessels. From what has been related, it is evident that the navigation of the Missouri is no easy matter, whatever American writers may advance to the contrary. In the dry season, vessels of 250 tons can indeed get up to New Orleans; but for vessels of a larger size this is impossible, as there is no tide, and the channel is full of shoals and sand-bars for a considerable distance up the river. In the time of high floods none but steam-vessels can sail against the stream; other vessels are sometimes 3 weeks in working up to New Orleans, though the distance is only 108 miles. A line of steam-boats, however, has now been established between New Orleans and Louisville up the Ohio, and they have been found to answer remarkably well.

The inundations of the Missouri commence in March and subside in July. In the month of May, the inundations have attained their greatest height, which averages about 25 feet perpendicular. The greatest part of the superfluous waters now finds its way to the sea by other channels than that which runs past New Orleans. Below the Iberville, the waters of the inundations never return within their channel, the channel of the river being on a higher level than that of the adjacent grounds. For 50 miles W.

its course, by cutting across one of these narrow necks, and had saved, consequently, 15 miles of a bend. Father Charlevoix relates, that in the year 1722, at Point Coupee, or Cut Point, 68 miles below the head of the Delta, or where the Chiefalaya branches off to the N.W., the river made a great turn; and some Canadians, by deepening the channel of a small brook, diverted the waters of the river into it. The impetuosity of the stream was so violent, and the soil so loose, that in a short time the point was entirely cut through, and travellers saved 42 miles of their voyage. The old bed has no water in it, the times of the annual inundations excepted. The new channel has since been sounded with a line of 30 fathoms, without finding bottom. So moveable are the sand-bars thrown up by the Missouri, that the party under captains Lewis and Clarke, having encamped on one of them for the night, were awaked by the sentinel on watch, who told them that the ground was sinking; and accordingly, before they could strike their tents and get into their boats it had almost entirely disappeared.

of the river from the Ohio downwards, the inundations extend; but on the eastern side they are checked by a chain of heights which does not leave, in general, a space of more than 5 miles for the river to overflow. This space may be regarded as the ordinary channel of the river on the eastern side, in high floods, and these heights as the outer bank, being properly the commencement of high and dry land; so that the Missouri has, correctly speaking, two banks,—the inner and the outer; the former being the limit in the dry season, and from 20 to 25 feet above the level of the stream,—the latter, the boundary in the season of the periodical floods. These inundations of the river force all its branches to overflow their banks, and that in proportion to the degree of declivity. On the E. side, the rivers are completely dammed up for 15 or 20 miles above their mouths, and are compelled to overflow their banks; but each of these rivers, like the Missouri, has also an inner and an outer bank; the former being bounded on both sides by a small stripe of low ground, from 60 to 80 yards wide, and this again limited by a gentle slope or secondary bank, and this secondary bank prevents the adjacent land from being overflowed. On the W. side, the rivers suffer a much greater interruption in their course than those on the opposite side, as there is little or no acclivity for many miles back into the country. During the inundation, in 1799, the river Washita—which falls into the Red river, 26 miles from its junction with the Mississippi—was so dammed up beyond the post of the Washita, a distance of more than 120 miles up, or 200 miles by the windings of its stream, that a stagnation and consequent corruption of its waters took place, which destroyed all the fish within its influence. The slime deposited by these annual floods is great, and similar to that which the Nile deposits in Egypt. In half a pint tumbler of the Missouri water has been found a sediment of two inches of slime; it is, notwithstanding, we are told, extremely wholesome and well-tasted, and very cool in the hottest season of the year.[13]

[13] Above the mouth of Red river, from 31° to 33° N. lat., the inundation is, at a medium, 20 miles wide—covering 2,770 square miles. Below 31° N. lat., to the outlet of La Fourche, a distance of 80 miles, the medium width of the inundation is 40 miles, and covers 3,200 square miles. Below this, the inundation occupies a space of 2,370 square miles. The inundation of the Red river occupies 2,550 square miles; in the Mississippi state, the inundation covers 1,000 square miles. The total of inundated surface below 33° N. lat. is 12,000 square miles. Four-fifths of the inundating water escape by the Chiefalaya branch, 3 miles below the mouth of Red river. The tide never rises above 2½ or 3 feet in the gulf of Mexico, yet it frequently approaches within 30 miles of the head of the Chiefalaya. So great is the general flatness of the North American continent, between the Rocky mountains on the W. and the Alleghanies on the E.—between the gulf of Mexico on the S. and the northern upland that separates the sources of the Mississippi from those of Red river and the St Lawrence,—that the degree of slope on which the various branches of the Mississipi, and even that river itself, run is extremely small. The source of the Mississippi in 47° 42′ N. is not more, probably, than 1,000 feet above the level of the gulf of Mexico, into which it falls—which, on a slope of 2,750 B. miles by the course of the stream, does not exceed 4½ inches per mile, even including the falls of St Anthony and Packagama, together 78 feet. The confluence of the Mississippi and Missouri does not exceed 400 feet above the level of the Mexican gulf; so that the slope is still less than 4 inches per English mile. On the line of the Ohio, the slope is equally small. At Cincinnati, 1,618 B. miles by water from the sea, the bed of the river is only 430 feet above the sea; so that the degree of slope is only 3 1-5th inches per mile. Even at Pittsburg itself, the level of the Ohio does not exceed 750 feet above the sea; so that the degree of slope on 2,061 miles of descent to the sea, is not more than 4½ inches per mile; and the very source of the Ohio itself is not 1,000 feet above the sea. This extreme flatness, however, of the great basin of the Mississipi is exceedingly favourable for navigation, and particularly so for internal water communication by canals.—All the bays, inlets, and rivers, on the coast of the United States, enter the sea from N. W. to S. E. In the southern states, there is a remarkable paucity of good harbours. Many of the rivers in these states are rendered almost useless for internal navigation, by falls and rapids in the upper parts of their courses; and by numerous and large sand-bars at their mouths, particularly in the Caro-

The Mississippi.] The river Mississippi is the greatest of the four great branches whose tributary waters contribute to swell the volume of the Missouri. From its source in 47° 42′ N. lat., and 95° 8′ W. long., to where it enters the Missouri, in N. lat. 38° 55′ and W. long. 89° 57′ 45″, it runs an absolute course of 1,418 miles. Father Charlevoix has described the confluence as exceedingly grand, each river being half a league broad, but the Missouri as the broader, deeper, and more rapid of the two. Captain Clarke states the Missouri, at the junction, as more than a mile broad, but says nothing of the Mississippi. Mr Mellish is, therefore, very inaccurate, in stating the breadth of the Missouri here as only 700 yards. Eighteen miles above, the Mississippi receives the Illinois from the N.E.

The Illinois, &c.] The Illinois is 450 yards wide at its junction with the Mississippi; and as above the confluence the Mississippi makes a sudden bend to the W., the Illinois might be taken for the principal stream. The current of the Illinois does not exceed 2½ miles per hour. From the source of the Theakiki, near the southern extremity of the Michigan lake, to its entrance into the Mississippi, the whole course of the Illinois is 480 miles in a S.W. direction. *Illinois lake* is only an expansion of the river, 19½ miles long, and 5 miles broad in the middle, 240 miles below the source of the Theakiki. Beyond this the *Buffalo river*, 100 yards wide, enters the Mississippi, which, 5 miles above, expands to the breadth of nearly 2 miles. —About 100 miles beyond the mouth of the Illinois is the mouth of *Salt river*, 120 yards wide, and navigable for at least 200 miles in high water. —Nearly 230 miles up the Mississippi, the river *Moingoma* falls into it from the N.W., after a course of 350 miles in direct distance.—Above the mouth of the Moingoma, a series of difficult rapids, 11 miles in length, impede the navigation of the stream.—The *Jowa*, 300 yards wide, after a S.E. course, enters the Mississippi 61 miles above the rapids.—Fifty miles above the Jowa is the mouth of *Rocky river*, 300 yards wide. This stream has its source near Green bay, or the Bay of Puans, upwards of 450 miles from its mouth, and is navigable for 300 miles. Beyond this are a series of rapids, which are a continued chain of rocks for 18 miles, in some places reaching from shore to shore; and which, though containing more water than the rapids above the Moingoma, are yet much more difficult to pass.—In N. lat. 43° 44′ 8″, and W. long. 92°, is the mouth of the *Ouisconsen* river, nearly half a mile wide. This river is the grand source of communication between the great lakes and the Mississippi, and is the route by which all the traders of Michillimackinack convey their goods for the trade of the Mississippi, from St Louis to the Crow river, and the confluent streams which are in those boundaries. From the mouth of the Ouisconsen to the portage is 60 leagues. The portage is only two miles, to the forks of Fox river, which falls into the bottom of the bay of Puans.

linas. In the whole coast of North Carolina, there is not one good harbour. Formerly there was a good harbour at Cape Lookout; but since the year 1777, it has been completely filled up with sand. The bounds of Pimlico, Albemarle, and Cove, are indeed extensive, and run to a considerable distance up the country; but they may be considered rather in the light of lakes, than of sounds or arms of the sea; as the inlets by which they communicate with the sea are so small as to be navigable only by boats or small vessels, and admit very little of the tide. These sounds are neglected by American geographers; as the whole country between them is one continued swamp, and no city of importance is found near them. In the whole coast of South Carolina, there are only three harbours, Charleston, Port Royal, and George Town. That of Port Royal, however, is capable of securing the largest fleets. The same difficulty of recess for vessels of magnitude, is also characteristic of all the mouths of the rivers in Georgia, as they have all sand-bars at their mouths; and the same is the case all round the coast of Florida, to beyond the mouths of the Mississippi.

The Fox river, at these forks, is navigable for boats of four tons weight all the way, for 57 leagues, to its mouth, where it is 200 yards wide. At the above portage or carrying place, the waters in the dry season separate, part going to the Mississippi and the gulf of Mexico, and part to Lake Michigan, the St Lawrence, and the Atlantic ocean. But in the wet season, when the waters are high, canoes and loaded boats pass over the portage; and a canal might be easily cut, so as to admit of a water communication at all times, between the Mississippi and the lakes, by means of the Ouisconsen and Fox rivers.—Beyond the mouth of the Ouisconsen, *Black river* enters the Mississipi, on the E. side.—About 770 miles up the Mississippi, and in N. lat. 44° 50′, the *Chippeway river* falls in from the N. This is a deep and majestic stream, at least half a mile wide. It communicates by a short portage with Montreal river, which falls into Lake Superior. *Lake Pepin,* below which is the mouth of the Chippeway, is merely an expansion of the river, 22 miles long, and from 4 to 1½ miles broad.—The river *St Peter's* falls into the Mississippi on the S.W. side, 9 miles below the rapids, at the foot of the falls of St Anthony. This is a deep and beautiful river, running, according to Carver, through a delightful country.—From the St Peter's to the *Falls of St Anthony,* the river is contracted within high hills, and is one continued rapid or fall, the bottom being covered with rocks, which, in low water, are some feet above the surface, with narrow channels between them. These falls are by no means to be compared with those of the Niagara, or the Missouri, for sublimity, variety, or magnitude. The fall of the water, between the place of unloading and reloading, is 58 feet; the perpendicular fall of the shoot, 16½ feet; the width of the river above the fall, 627 yards, and below, 209. Beyond these falls the navigation becomes extremely difficult.—Beyond the mouth of *Pine river* are three successive settlements of the North West company; and 15 miles beyond the third settlement, are the falls of *Packagama,* 20 feet in perpendicular height, and, next to the falls of St Anthony, the greatest impediment to navigation. Here the river is a quarter of a mile broad below the falls; but immediately above it is only 20 yards wide.—Forty-five miles beyond is *Little Lake Winnipeg,* 36 miles in circumference, communicating with Upper Cedar Lake, the upper source of the Mississippi, by a water course, or strait, of 15 miles. *Leech Lake*-branch is reckoned the main source, being the S.W. fork of the Mississippi, but the Winnipeg branch is navigable the greatest distance. In many places Leech Lake branch is not more than 10 or 15 yards wide, although 15 or 20 feet deep. The source of Leech Lake branch is in 47° 16′ 18″ N. lat.; and that of Upper Cedar Lake branch in 47° 42′ N. lat. and 95° 8′ W. long. About Leech Lake the whole face of the country has the appearance of an impenetrable morass, or boundless savannah.

The Ohio, &c.] The Ohio may be viewed as the eastern, and second great branch of the Missouri. In length of course it is equal to the Mississippi branch, and little if at all inferior in volume of water. The name *Ohio* is an Indian appellation, signifying 'the beautiful river.' This epithet is not bestowed on it for the whole of its course, but commences at the confluence of the two principal streams, at Pittsburg; above the junction it is called the *Alleghany.*—The remotest source of the *Alleghany* is in the state of Pennsylvania, in N. lat. 41° 45′, and W. long. 78°. It is composed of two small streams.—At Pittsburg, the Alleghany being joined by the *Monongahela,* the confluent stream receives the appellation of the Ohio. The Monongahela is formed by the confluence of two streams,

both rising from the Alleghany chain, in the N.W. angle of Virginia, and running parallel to each other for 60 miles in a direct line. The absolute course of the Monongahela is more than 200 miles, but not above 130 in a direct line from S. to N. It seems a larger and deeper stream at Pittsburg than the Alleghany, which in the dry season has not above 7 feet water where deepest. The waters of the Alleghany are always clear and limpid, while those of the Monongahela, on the contrary, become muddy and turbid, whenever there are a few days of successive rain in that part of the Alleghany mountains where it rises. Each of the streams is 400 yards wide at the conflux; and after the junction, the united stream is more enlarged in depth than in breadth.

The Ohio, formed by the junction of the Monongahela and Alleghany, appears to be rather a continuation of the former than the latter, which arrives at the confluence in an oblique direction. From Pittsburg to the mouth of the Ohio is 1,188 miles by the course of the stream, according to Hutchins; and 1,074, according to Filson's account of Kentucky. But later observations have proved, that Hutchins' estimate was too great by about one-seventh. It receives a vast number of tributary streams on both sides, in its progress to the Missouri. For the space of 300 miles below Pittsburg, the Ohio runs between two ridges of hills, rising from 300 to 400 feet in height. These appear frequently undulated at their summits, but at other times seem to be perfectly level. They sometimes recede, and sometimes approach the banks of the river, and have their direction parallel to that of the Alleghany chain. These ridges gradually recede farther down the river, till they disappear from the view of those who descend the Ohio. It is not till this river has burst its passage through a transverse chain, at the rapids, near Louisville, that it rolls its waters, through a level and expanded country, as far as the Mississippi.[14] The general appearance of the river is beautiful, placid, gentle, and transparent, except in the times of high water. There are two seasons of periodical inundations; namely, winter and spring. According to some, the vernal inundations of this river commence in the latter end of March and subside in July; and according to others, they commence early in February and subside in May. It must be observed, however, that this period is forwarded or retarded as the rivers thaw sooner or later, which may in some measure reconcile these apparently discordant statements. The Ohio is then swelled to a prodigious height, varying in different places, as it is more or less expanded in breadth. It is a favourable circumstance for the country in the upper course of the Ohio, that it has very high and steep banks; having gradually hollowed out for itself a deep and comparatively narrower bed, being, like all its southern tributary streams, inclosed as it were in a groove between them, which prevents the general level of the land from being overflowed for many miles, and thereby rendered marshy and unwholesome, as in the lower Missouri, and in the lower part of the Ohio. Yet high as these banks are, the Ohio is both a dangerous and troublesome neighbour to the towns which are not sufficiently far removed from them. That part of the town of Marietta situated at the junction of

[14] The name of *river bottoms*, or *flat bottoms*, a term everywhere to be met with in American books of travels and topographical description, is given to those low lands covered with wood, lying between the foot of the hills above mentioned and the sides of the river, and which are sometimes five or six miles broad. The greater part of the rivers which fall into the Ohio, both large and small, have similar bottoms; which, though like those of the Ohio, are of easy cultivation, yet are by no means equal in fertility.

the Muskingum with the Ohio, though elevated 45 feet above the ordinary level of the stream, has been twice inundated, and consequently abandoned by the inhabitants. The town of Portsmouth, at the mouth of the Great Scioto, and 218 miles below Marietta by water, though elevated 60 feet above the usual surface of the river, is also subjected to the same misfortune, which has materially affected the prosperity of the place. At Cincinnati, the breadth of the river is 535 yards, and the banks 50 feet in perpendicular height, yet these are annually overflowed. The winter floods commence in the middle of October, and continue to the latter end of December. Sometimes, in the course of the summer, abundant rains fall among the Alleghany mountains, by which the Ohio is suddenly raised, but such occurrences are rare. In the times of these two periodical floods —which taken together last for near half the year—ships drawing 12 feet water may sail with perfect ease from Pittsburg to New Orleans, a distance of near 2,200 miles. In these seasons, the passage to the falls may be accomplished in nine or ten days, but it is generally effected in twelve days. The difficulty of navigating the Ohio, during the dry season, is only confined to the upper part of its course, or between Pittsburg and Limestone, a space of 425 miles by water; and this, not so much owing to the shallowness of the stream, as to its being divided by islands; for the depth of the Monongahela branch of the Ohio alone, at Pittsburg, is 12 feet. Michaux counted no less than 50 of these islands, in the distance of 390 miles; some of them only containing a few acres, and others exceeding a mile in length. Two canals have been very lately constructed, one from Drayton to Cincinnati, and the other from Cleveland on Lake Erie to Portsmouth on the Ohio, a distance of 309 miles. The debt contracted by these canals is about 4,000,000 of dollars, to be re-imbursed from direct taxes and profits of the canals. The benefits arising from the completion of these canals is incalculable, affording and securing an unbroken chain of inland navigation from New York to the gulf of Mexico, and to every part of the country east and west of the Missouri, as far as its waters are navigable. In time of peace, it will afford commercial advantages to a great extent; in time of war, it will afford great facilities in the transportation of troops and munitions of war.

The Wabash.] The Wabash, called *St Jerome* by the French, empties itself into the Ohio, in 37° 41′ N. lat., and 87° 50′ W. long. Next to the Tennessee, it is the largest tributary of the Ohio. Its remotest source is in that high, though level tract, that separates it from the sources of the Illinois, and the river St Joseph, which runs north into Lake Michigan. Thence it runs a course of 350 miles, in a straight line, S.W. to the Ohio; but if the windings be included, the course is more than 600. The Wabash is a beautiful, clear, transparent stream, with high and upright banks; less subject to overflow than any other river in this part of America. At the mouth, it is 270 yards wide, and 21 feet deep in the dry season.

The Tennessee.] Fifty-seven miles by water above the junction of the Ohio and Missouri, the river Tennessee disembogues itself into the former stream. This river was anciently called the *Cherokee*, from the Indian tribe inhabiting its banks. It is formed by the junction of two large branches at West Point, called the *Clench* and *Holston*, each from 160 to 200 yards broad. Both these streams have their source in the S.W. angle of the state of Virginia. From Fort Deposit, its most southern point, the Tennessee runs N.W. 70 miles in a direct distance to Fort

Hampton, at the S.E. point of the Muscle Shoals, and the confluence of Elk River with the Tennessee. Here it is expanded to the breadth of 3 miles, which breadth continues for a distance of 25 miles; but the channel is obstructed with a number of islands, formed by trees and drifted wood, brought hither at different seasons of the year, in freshes and in floods.

The Arkansaw.] The Arkansaw is the third great branch of the Missouri, and has a longer course, by one-third, than either of the other Mississippi branches, but is much less known. This river is so denominated from a tribe of Indians, who inhabit three villages on the south side, not far from its entrance into the Mississippi. The Arkansaw, formerly denominated the *Great River of Louisiana*, rises in W. long. 112°, and N. lat. 41° 45′, in the great range of mountains, that stretch in a S.E. and N.W. direction along the frontiers of New Mexico; and which, from the glistening of the during snows on their frozen sides and summits, caused by the reflection of the solar rays, have received the significant appellation of 'the Shining Mountains.' One ridge of this chain separates its source from that of Colter's River, one of the head waters of the Rio Del Norte; and by another ridge, both its source and uppermost part of its course are separated from those of the Platte. In Humboldt's map of New Spain, the Arkansaw is denominated the *Rio De Napestle.* From its source to its mouth, the Arkansaw runs a very winding course of 2,173 miles, in a S.E. direction, and 1,500 in a direct line. Of this course, 192 miles are performed among the mountains, and 1,981 through the plains of Upper Louisiana. During its mountainous course, the Arkansaw is alternately bounded by perpendicular precipices, immense cliffs, or small prairies, on which the buffalo and elk have found means to arrive, and are almost secure from danger, and from their destroyer, man. In many places the river precipitates itself over rocks, so as to be visible one moment only in the boiling and foaming of its waters, at the next disappearing in the chasms of the overhanging precipices. The Arkansaw is a large, deep, and navigable stream, for several hundred miles below its source, being fed with numerous streams from the mountains; but there is one singular circumstance attending it, namely, that, at the distance of 400 miles from its source, and 200 after leaving the mountains, the bed of the river becomes extremely wide, and a perfect sand bar for several hundred miles below, as far as the mouth of the Negracka, in the summer season; the water then standing in ponds, there not being a sufficiency to procure a running course all that distance.[14] The Arkansaw receives a number of large tributary streams, in the latter half of its course, as the *Negracka*, the *Neskalouska*, *Newkesetonga*, and *Nesoutebrara* or *Canadian river*, and the *Pottoe*, from the south; and the *Vermilion*, *Grand*, *Des Illinois*, and *Au Mellieu* rivers, from the north. Of these, the four first run separate courses of 200 miles each; but the Canadian River is so large as to be reputed the main branch of the Arkansaw.

The Red River.] The Red river is the fourth great branch of the Missouri. Of this stream we have very little knowledge, as it has been but partially explored,—the party sent by the American government having been stopped by the Spaniards 300 miles by land up the river in a

[14] There is no other way of accounting for this phenomenon but this, that the low, dry, and sandy soil of Louisiana, imbibes all the waters which flow from the hills and mountains, and renders the river less navigable in the dry season, at the distance of 500 than at 200 miles from its source. The same circumstance is peculiar to all rivers, whose courses lie through warm, dry, and sandy countries, whose waters are more or less imbibed by the thirsty soil, or absorbed by the intense heat of the solar rays.

direct line. The source of the Red river is supposed to be in the mountains of Namhi, to the N.E. of Santa Fé, in N. lat. 38°, and W. long. 104°, according to Humboldt's map of New Spain, where it is denominated the *Rio de Natchitoches*, and the *Rio de Pecos*, or 'River of Cattle.' Pike's map gives no additional satisfaction on the subject, he being also seized by the Spaniards, while encamped on the Rio Grand del Norte, which he had mistaken for the Red river. All that is known concerning its source, is merely that it rises to the N.E. of Santa Fé; but as the position of that place is not yet accurately fixed, it is impossible to fix that of the source of the Red river with accuracy. From Dr Sibley's report, who advanced a good way up the stream, it would appear that it performs a very winding course of 1830 miles, from the source, to its entrance into the Mississippi, in N. lat. 31° 1′, and W. long. 91° 33′. It is 500 yards wide at the mouth, with a current so gentle, as to be hardly perceptible in the dry season. Its banks are clothed with willow; the land low, and subject to inundation, to the height of 40 feet and upwards, above the level of the water in the dry season. It derives its name from the rich fat earth, or marl of that colour, borne down by the floods, the last of which appears to have deposited on the high bank a stratum, or layer, more than half an inch thick. It narrows as it is ascended, to its confluence with the Washita, where each river is 150 yards broad.

The White River.] The White river, a stream of nearly equal magnitude to the Arkansaw, falls into the Missouri 15 miles above the mouth of the former, after performing a very sinuous course of 600 miles.

Having thus described the vast Missouri, and its four great subsidiary streams, the Mississippi, the Ohio, the Arkansaw, and the Red River, we shall conclude with a short sketch of the immense extent of country watered, or, to speak more correctly, drained by this mighty stream and its numerous branches. The eastern extremity of this immense river is the *Oswaya creek*, the most eastern source of the Alleghany River, which rises in Pennsylvania, 180 miles N.W. of Philadelphia, in long. 0° 50′ W. of Washington. The western extremity is a branch of the Missouri, in long. 35° 15′ W. of Washington, or 112° 12′ W. of Greenwich, within 600 British miles of the Pacific ocean. The direct distance between these extremities is at least 1754 British miles. The northern extremity is a branch of the Missouri, in lat. 50° 42′ N. and long. 31° W. of Washington, or about 108° W. of Greenwich, called the *Milk River*, 580 miles W. by N. of the Lake of the Woods. The southern extremity is the south pass into the gulf of Mexico, in N. lat. 29°, 90 miles direct distance below New Orleans. The distance between these extremities, in a direct line, is 1740 British miles. The Missouri, with its numerous branches, drains a surface of 1,346,289 square miles, or 861,624,960 acres, without a single lake in this whole extent, those small ones at the sources of the Mississippi and Jaune rivers excepted. The following table exhibits the square miles of territorial surface drained by the Missouri and its various branches:

	Square miles.
Missouri Territory, the whole,	985,250
North-west Territory, one half,	53,000
Illinois Territory, the whole,	52,000
Indiana Territory, nineteen-twentieths,	37,050
Ohio, four-fifths,	35,088
Pennsylvania, one-third,	16,493
New York, one-hundredth,	521
Maryland, one-hundredth,	140

Virginia, two-fifths,	28,200
North Carolina, one-fiftieth,	1,110
South Carolina, 1-150th,	152
Georgia, one-thirtieth,	2,000
Kentucky, the whole,	40,110
Tennessee, the whole,	43,200
Mississippi Territory, one-third,	31,160
Lower Louisiana, one-half,	20,500
	1,315,974

The whole territory of the United States being, as before stated, 1,208,252,840 acres, the Missouri waters nearly three-fourths of the whole. "Twenty-five years ago,"—said the president of the United States, in his message to congress in 1826,—the river Mississippi, (Missouri,) was shut up, and our western brethren had no outlet for their commerce. What has been the progress since that time? The river has not only become the property of the United States from its source to the ocean, with all its tributary streams, (with the exception of the upper part of the Red river only,) but Louisiana, with a fair and liberal boundary on the western side, and the Floridas on the eastern, have been ceded to us. The United States now enjoy the complete and uninterrupted sovereignty over the whole territory, from St Croix to the Sabine."

MOUNTAINS.] The territory of the United States, though embracing in its wide extent several elevated ranges of great length and breadth, cannot, on the whole, be considered as a mountainous country. The land along the whole line of sea-coast is level for a considerable distance into the interior. The breadth of this level tract expands from 50 miles in the N.E. extremity, gradually as we advance to the S.W., till, in the state of Georgia, it has attained an extent of nigh 200 miles. Beyond this, the land gradually rises into mountains, which are much more remarkable for their length and breadth, than their height. They sometimes consist of numerous parallel ridges, rising successively behind each other; at other times they run into knots; and sometimes they recede from their parallel direction into what are called spurs. These ranges, or belts of mountainous country, though receiving a vast number of different appellations, are most usually known by the name of the *Alleghanies*. The long continuity of this chain running parallel with the whole line of sea-coast, has obtained it the name of the *Endless mountains*, from the northern savages. The French and Spaniards, who first became acquainted with it in Florida, applied to it, throughout its whole extent, the name of *Apalachian*, which is still retained by a considerable river of that country. Geographers and geologists are not yet agreed as to the precise commencement and termination of the Alleghany chain; some, as governor Pownall, and others, terminating the chain at the Katskill mountains, 90 miles above New York; and considering the mountains of New Hampshire, and Vermont, and the chain denominated the *Land's height* (constituting the boundary between Lower Canada and the province of Maine), as entirely distinct ranges.
mountains, and unconnected with the Alleghanies; others, as Volney and his copyists, Beaujour and Pinkerton, supposing the Alleghanies to commence at the south bank of the St Lawrence, near its mouth, thence to run in a S.W. direction, gradually diverging from the river, then to turn to the S. through the state of Vermont, separating the waters of the Connecticut from those of Lake Champlain, and then changing its direction to the S.W., crossing the Hudson at West Point, where it is recognized by the name of the *Highlands*, and continuing up the river, along the west-

ern bank, till it joins the Katskill mountains. As we have no positive documents to determine the fact of the continuation of the Alleghanies N.E. as far as the mouth of the St Lawrence, we are obliged to suspend our judgment till farther and better information be received; and consider the Alleghanies, in the meantime, as terminating at the Katskill mountains. We shall therefore classify the mountains under the following appellations, namely: the *White mountains*, the *Green mountains*, the *Alleghanies*, the *Black mountains;* and the great range of the *Mexican* and *Rocky mountains*, which separate the territory of the United States from the Spanish colonial dominions, and the waters of the Columbia from those of the Missouri.

The White Mountains.] In New England, largely considered, are four principal ranges of mountains running N.E. and S.W., projecting from the main ridge that forms the boundary of the United States, and separates the waters of the St Lawrence from those that run south through the northern states. Of these ranges, that denominated the White mountains, in New Hampshire, is the most elevated. According to Dr Bigelou, who lately examined and ascertained their height, geological structure, and other principal features, these mountains are rather a group than a range, 18 miles long by 10 miles broad. Their height has been greatly overrated by former writers, as Dr Dwight, who calculated it at 12,800 feet, by Belknap at 10,000 feet, by Cutter at 9,000 feet, by Williams at 7,800 feet, and finally, by Dr Peck at 7,000 feet. Partridge found the elevation of Mount Washington, their highest summit, by the barometer to be only 6,600 feet above the sea, and the base 1,888 feet above the sea, instead of 3,500, as stated by Cutter. Bigelou's barometrical estimate is the following:

1.	Mount Washington,			6,234 feet above the sea,	and above the base		4,464
2.	Summit, above the sea,			5,328.	Above the base,		3,554
3.	Do.	do.	do.	5,058.	Do.	do.	3,288
4.	Do.	do.	do.	4,866.	Do.	do.	3,096
5.	Do.	do.	do.	4,711.	Do.	do.	2,941
6.	Do.	do.	do.	4,356.	Do.	do.	2,586

Base of the group, 1,770 feet above the sea.

The difference between these observations and those of Partridge does not exceed 300 feet. However reduced in height by subsequent accurate measurement, they are still the highest in the United States E. of the Mississippi.

A second range of mountains commences near Stonnington, a maritime town of Connecticut, running to the N.E., and is sometimes broken and disconnected; it then rises again, and ranges in the same direction into New Hampshire, where, in N. lat. 43° 25′, it runs up into a high peak, called *Cowsawaskoog*. This ridge extends upwards of 100 miles.

Farther N.W., another chain commences at Lyme, on the east of Connecticut river, forming the eastern boundary of Connecticut vale. It runs northerly, 10 or 12 miles east of the river, and passes through Massachusetts, where it is called the *Chicabee mountains;* thence, crossing into New Hampshire, 20 miles north of the dividing line, it runs up into a high peak, called *Monadnick*, in Cheshire county, 3,254 feet high, which terminates this ridge of the range. The loftiest summits are *Saddle mountain* and *Hoosack*,—the former being 4,000, and the latter 3,500 feet in altitude. A western ridge continues, and in 43° 15′ runs up into *Sunappie peak.* About 50 miles further in the same ridge is the *Mooscoog*, the highest hill in New Hampshire, the White mountains excepted.

The fourth range lies farther west, between the rivers Hudson and Connecticut, and this last and Champlain lake. It is denominated *Verdmont*, or the *Green mountain*; and which, softened into *Vermont*, gives name to one of the states. The cause of this appellation arises from its perpetual verdure, being covered on its western side with hemlock, pine, spruce, and other ever-greens. The Green mountains, according to Warden, extend from Canada through Vermont, Massachusetts, and Connecticut, from N.N.E. to S.S.W. 400 miles in length by 15 miles of breadth. By Samuel Williams the elevation of *Killington Peak* is 3,454 feet above the sea, and 3,184 above the level of Lake Champlain at the mouth of Otter creek. Lake Champlain is consequently only 270 feet above the sea. According to the more recent observations of captain Partridge, taken barometrically, Killington Peak is 3,924 feet above the sea, and 2,994 above its immediate base, which is consequently 930 feet above the sea.

The Alleghany Chain.] Taking the commencement of the Alleghanies at the Katskill mountains, on the W. of Hudson's River, and 120 miles above New York, the chain is of vast extent, running S.W. as far as the confluence of the Cahawbaw and the Coosa, whose united streams form the Alabama, a distance of 1000 miles and upwards. There are two distinct chains belonging to the great Alleghany range in the state of New York, namely, the *Katskill*, which is the most northern, and is the continuation of the proper Alleghany, or western chain,—and the *Wallkill*, which crosses the Hudson at West Point, 40 miles below the Katskill, and is the continuation of the *Blue ridge*, or *Eastern chain*, which is the most general appellation for the exterior ridge which fronts the Atlantic.[15] These two ranges run parallel to each other, south-west, crossing the Delaware and Susquehannah rivers; removing farther from the coast, as they proceed southward through the states of New York, Pennsylvania, Maryland, and Virginia, till having arrived at the frontiers of North Carolina and Virginia, they unite there into a knot, which Volney denominates the *Alleghany arch*, because the principal chain embraces there, in a curve, all its collaterals from the east. A little farther to the south, but still in North Carolina, a second knot unites all the collateral ridges from the west, and forms a culminating point of heads of rivers. From this knot a ridge of mountains runs off to the west. The second bifurcation stretches S.W. and then W., under the name of the *Cumberland mountains*, through the whole state of Tennessee, while the proper Alleghany chain, left almost alone, continues its course to the S.W., and completes the boundary of Georgia and the two Carolinas. The chain continues its progress westward along the 35th parallel of N. latitude, dividing the waters of the Tennessee from those that fall into the gulf of Mexico. Thence proceeding S.W. as far as 34° 30′ N. lat., it turns to the N.W., separating the waters of the Tombecbe and the Yazoo from those of the Tennessee; and runs parallel to this last river till its entrance into the Ohio. A projecting ridge from the main chain runs S.W. along the banks of the Coosa, till its junction with the Cahawbaw, near 32° N. lat., which may be regarded as the S.W. termination of the whole chain. From the Alleghany arch, there are three principal ridges, or ramifications, of the Alleghany, running N.E. and nearly parallel to each other, namely, the

[15] We have thus fixed the commencement of the Alleghanies at the Katskill and Walkill mountains, not being positively certain whether the Green mountains of Vermont, the White mountains of New Hampshire, or the Land's height, are to be regarded as elongations of the Katskill and Wallkill ranges.

Alleghany proper, the *North mountain*, and the *Blue ridge*, or *South mountain*, as it is termed in the maps of Evans and other geographers. The Alleghany, comprehending its parallel chains and intervening valleys, varies from 60 or 70, to 180 miles in breadth. Its height has been ascertained only in some few parts of its course, and the general elevation is consequently undetermined; but it is supposed not to exceed that of the Vosges or Wasgaw, that is, from 4,000 to 5,000 feet. The highest peak of the Katskill mountains, forming the N.E. termination of the Alleghanies, measured in 1798, by Peter la Begarre, was found to be 3,549 feet above the level of Hudson's river, and 3,801 above the level of the sea; it has been called *Round top*. The *Otter peaks*, the highest of the Blue ridge, or eastern chain, were supposed by Jefferson to be 4,000 feet high; but succeeding and more accurate observations have ascertained the elevation of the one peak not to exceed 3,000 feet, and that of the other to be only 2,900. In Pennsylvania, the elevation of the Alleghanies, according to Dr Rush, is 1,300 feet above the flat country, and the ascents are so gradual from the plain, as scarcely to be noticed by travellers. According to Michaux, the Alleghanies attain their highest elevation, where they separate North Carolina from the state of Tennessee. From the sea to the base of Tyron and Hogback mountains, near the boundary of Greenville and Spartanburg districts, on the frontier of North Carolina, the ascent is 800 feet; and these mountains are 3,840 feet from this base, or 4,640 feet above the level of the sea. The mountainous district, or apex of South Carolina, presents seven or eight mountains, running in regular directions, the most distinguished of which is the *Table mountain*, rising 3,000 feet from its base, and 4,000 feet above the sea-level. The Alleghany mountains are, with peculiar felicity of expression, denominated by Jefferson the spine of the United States; and divide the eastern from the western waters, and the whole of the territory, from the Mississippi to the Atlantic, into three natural divisions, materially differing from each other in climate, configuration, soil, and produce, namely: the coast, the mountains, and the western territory. The last is denominated, by the inhabitants of the coast, the *back country*.

No other mountains worthy of notice occur in the United States, between the Atlantic and the Mississippi. The whole country north of the Ohio, as far as the Illinois, with a very few exceptions, has neither hills nor mountains, especially the tract lying between the Ohio and Lake Erie, which is one large flat, or high upland level, with its opposite slopes scarcely perceptibl . The highest hill in the vicinity of Pittsburg is only 460 feet above the bed of the Ohio, and 1,200 above the sea.

The Black Mountains.] There are but few mountainous ridges in Louisiana, considering the vast extent of country that lies between the Missouri and the grest western range. About the head of the Kanzas, the *Cote Noir*, or *Black mountains* commence, and soon after diverge into two principal ridges, with a number of lateral projections. The first ranges westward, along the northern shore of the Arkansaw, the second approaches the Rocky mountains obliquely. They seem to consist of several parallel ranges of considerable elevation, and 120 miles in breadth.

The Rocky mountains.] In extent, in elevation, and in breadth, the Rocky mountains far exceed the Alleghanies of the eastern states. Their mean breadth is 200 miles, and where broadest, 300. Their height must be very great, since, when first seen by captain Lewis, they were at least 150 miles distant. On a nearer approach, the sublimity of the prospect

is increased, by the appearance of range rising behind range, each yielding in height to its successor, till the most distant is mingled with the clouds. In this lofty region the ranges are covered with snow in the middle of June. From this last circumstance, these ranges have been sometimes denominated the *Shining mountains*—an appellation much more appropriate than that of the *Rocky* or *Stony mountains*, a property possessed by all mountains, but peculiar to none. The longitudinal extent of this great chain is immense, running as far N.W. as 60° N. lat., and perhaps to the Frozen ocean itself. The snows and fountains of this enormous range, from the 38th to the 48th degree of northern latitude, feed, with never-failing supplies, the Missouri and its powerful auxiliary streams.[16] We are indebted to the *Missouri Advocate* for the following account of general Ashley's discoveries in this quarter. He considers it quite possible to form a route across this formidable barrier to the Pacific ocean. The route proposed, after leaving St Louis, and passing generally on the N. side of the Missouri river, strikes the river Plate, a short distance above its junction with the Missouri; then pursues the waters of the Plate to their sources, and in continuation, crosses the head-waters of what general Ashley believes to be the Rio Colorado of the west, and strikes, for the first time, a ridge or single connecting chain of mountains, running from north to south. This, however, presents no

[16] In endeavouring to explore these Alpine heights, and the sources of the Red and Arkansaw rivers, by order of the American government, captain Pike and his whole party were completely bewildered amidst snows, and torrents, and precipices. The cold was so intense, that several of the party had their limbs frostbitten, and were obliged to be abandoned to their fate by Pike and his surviving companions. In a lateral ridge, separating the valley of the Arkansaw from that of the Platte river, in N. lat. 41°, is a remarkable peak, called the *Great White mountain*; so remarkable, indeed, as to be known to all the savage tribes for hundreds of miles round, and spoken of in terms of admiration by the Spaniards of New Mexico, and which formed the boundary of their knowledge to the N.W. The altitude of this peak was taken on the base of a mile by Pike, and found to be 10,581 feet above the level of the meadow at its base; and the height of this latter was estimated at 8,000 feet above the level of the sea; in all, 18,581 feet of absolute elevation; being 6,000 feet higher than the peak of Teneriffe, by Humboldt's measurement; or 2,852 feet short of that of Chimborazo, admitting the elevation of this last to be 21,472 feet. Captain Pike and his companions never lost sight of this tremendous peak, unless in a valley, for the space of ten weeks, wandering amongst the mountains. What is the elevation at the sources of the Missouri can only be matter of mere conjecture. The level of the river, where they left their canoes, could not be less than 6,000 feet above the sea; but how high the mountains rose above this point the narrative does not inform us, and hardly gives us any data to decide. The central chain, as usual, is marked in the map as highest, and covered with snow during the whole year. The latitude is between 45 and 47 degrees; and between these parallels, in Europe, the lower limit of perpetual congelation is fixed at from 9,000 to 10,000 feet above the level of the sea; and it can hardly be supposed that the summits of this snowy range were less than 8,500 or 9,000 feet high, making a reasonable allowance for the greater coldness of the American continent. Captain Clarke allows this central range to be 60 miles across, and that the shortest road across the different ranges is at least 140 miles, besides 200 miles more, ere they can reach a navigable river. In their first passage across these tremendous mountains, the American party suffered every thing which hunger, cold, and fatigue, could impose, during three weeks. They were compelled to melt the snow for their portable soup; many of their horses (which they used for conveying their baggage, not for riding,) were foundered by falls from precipices; the men became feeble through excessive toil, and sickly from want of food, as there are no wild animals in these inhospitable regions; and, but for an occasional meal of horse flesh, the whole party must have perished. In returning home from the mouth of the Columbia, their state was little better. Having again come in sight of the mountains, in the middle of May, they attempted, but in vain, to pass them, on account of the snow, which lay from six to ten feet deep, and were obliged to return, and rest in the plains to the 24th of June. These mountains are, therefore, a far more formidable barrier to the Pacific, than the Alleghanies to the back country, and can be passed with great difficulty only for three months in the year, namely, from the latter end of June to the latter end of September.

difficulty, as a wide gap is found apparently prepared for the purpose of a passage. After passing this gap, the route proposed falls directly on a river, called by George Ashley the Buenaventura, and runs from that river to the Pacific ocean. The face of the country, in general, is a continuation of high, rugged, and barren mountains; the summits of which are either timbered with pine, quaking-asp, or cedar; or, in fact, almost entirely destitute of vegetation. Other parts are hilly and undulating; and the valleys and table-lands (except on the borders of water-courses, which are more or less timbered with cotton wood and willows,) are destitute of wood; but this indispensable article is substituted by an herb, called by the hunters wild sage, which grows from one to five feet high, and is found in great abundance in most parts of the country. The sterility of the country generally is almost incredible. That part of it, however, bounded by the three ranges of mountains, and watered by the sources of the supposed Buenaventura, is less sterile; yet the proportion of arable land, even within those limits, is comparatively small; and no district of the country visited by general Ashley, or of which he obtained satisfactory information, offers inducements to civilized people, sufficient to justify an expectation of permanent settlement. The river visited by general Ashley, and which he believes to be the Rio Colorado of the west, is, at about 50 miles from its most northern source, 80 yards wide. At this point, general Ashley embarked and descended the river, which gradually increased in width to 180 yards. In passing through the mountains, the channel is contracted to 50 or 60 yards, and so much obstructed by rocks as to make its descent extremely dangerous, and its ascent impracticable. After descending this river about 400 miles, general Ashley shaped his course northwardly, and fell upon what he supposed to be the sources of the Buenaventura; and represents those branches as bold streams, from 20 to 50 yards wide, forming a junction a few miles below where he crossed them, and then empties into a lake (called *Grand Lake*), represented by the Indians as being 40 or 50 miles wide, and 60 or 70 miles long. This information is strengthened by that of the white hunters, who have explored parts of the lake. The Indians represent, that at the extreme W. end of this lake, a large river flows out, and runs in a westward direction. General Ashley, when on those waters, at first thought it probable they were the sources of the Multnomah: but the account given by the Indians, supported by the opinion of some men belonging to the Hudson Bay company, confirms him in the belief, that they are the head-waters of the river represented as the Buenaventura. To the N. and N.W. from the Grand Lake, the country is represented as abounding in salt. The Indians west of the mountains are remarkably well disposed towards the citizens of the United States; the Eutaws and Flatheads are particularly so, and express a great wish that the Americans should visit them frequently.

A great number of lateral ranges project to the S.E., E., and N.E. of the main range. Where the Missouri enters the plains, is the most eastern projection; and from where the Jaune leaves the snowy range, there is a lateral range, running more than 200 miles south-east, which is intersected by the Bighorn river. As these mountains have not yet been explored by the eye of geological science, it is impossible to say any thing respecting their component parts; but, from any thing that we can learn from Pike and Clarke, they seem to be chiefly granitic. No volcanoes have yet been discovered amongst them; but strange unusual noises were

heard from the mountains, by the American party, when stationed above the falls of the Missouri. These sounds seemed to come from the north-west. "Since our arrival at the falls," says the narrative, "we have repeatedly heard a strange noise coming from the mountains, a little to the north of west. It is heard at different periods of the day and night: sometimes when the air is perfectly still and unclouded, and consists of one stroke only, or of five or six discharges in quick succession. It is loud, and resembles precisely the sound of a six pounder at the distance of three miles. The Indians had before mentioned this noise like thunder, but we had paid no attention to it. The watermen also of the party say, that the Pawnees and Ricaras give the same account of a similar noise made in the Black Mountains, to the westward of them." Again, near the same place, it is afterwards said: "They heard, about sunset, two discharges of the tremendous mountain-artillery." Not a word more occurs upon the subject; but we know that similar explosions take place among the mountains near the head of the Washita, and among the mountains of Namhi, near the sources of the Red river, foolishly believed by Mr Brevel, who had ascended the source of the Red river thus far, to be occasioned by the bursting of the Spanish silver mines under ground.[17]

GEOLOGY.] The whole territory of the United States lying between the Atlantic and the Missouri, the gulf of Mexico and the great lakes, may be divided, according to Volney, into the five following regions, namely: the granitic, sandstone, the calcareous, the sea-sand, and river alluvions.

Granitic Region.] The first, or granitic region, extends from the entrance of the St Lawrence, down to Long island. In New Hampshire and Maine it is mixed with some sandstone and lime; but the White Mountains, in New Hampshire, are granitic. The granitic region in the state of New York seems to be divided from that of sandstone by the Mohawk river. There is some granite, however, on the banks of the Susquehannah, and many blocks of the same substance at the foot of the south-west chain in Virginia.

Sandstone Region.] The region of sandstone comprises the western branch of the Green mountains, in Vermont (the eastern declivity being granitic),—the Katskill mountains,—all the mountainous country of Blue Ridge, Alleghany, Laurelhill,—the Gauley mountains, at the sources of the Great Kanhaway,—the two great knots, or concentrated transversal ranges of the Alleghanies,—and in general, all their chain, as far as the angle of Georgia, and the Apalachies, to the south. Towards the N.W., this sandstone region terminates on the southern sides of the Genessee, Ontario, and Erie lakes, in a district of slaty schist and blue marl, which even seems to form the beds of these watery reservoirs, as is evident from

[17] In our present state of ignorance respecting these mountains, it is impossible to give a solution of this phenomenon, though it may proceed from some distant volcano, which, like Stromboli, may be in a state of constant activity, but more irregularly. It is well-known that the sounds of volcanoes are heard at very great distances, as at Guatimala, where the sound of the volcano of Cotopaxi was distinctly heard, though more than 220 miles distant. Some indications of volcanoes had been seen by the American party, when ascending the river, about 60 miles below the mouth of the Little Missouri, where they passed several very high bluffs on the south side, one of which had been lately a burning volcano, as the pumice stones lay very thick around it, and emitted a strong sulphureous smell. Similar appearances are mentioned by Mackenzie, as taking place among the Rocky mountains on their eastern side, in N. lat. 56° and 120° W. long. "Mr Mackay," says he, "informed me, that in passing over the mountains, he observed several chasms in the earth that emitted heat and smoke, which diffused a strong sulphureous stench." From all these circumstances combined, it is natural to infer that the sound proceeds from some very distant and unknown volcano.

the soundings taken in them, and the stones in their bottoms and on their banks.

Calcareous Region.] The third region of calcareous or limy earth includes all the western, or back country, extending from the western foot of the Alleghanies, as far as the alluvion of the Missouri, and N.W., across the rivers and lakes, to the sources of the Saskatchewine, and the Chipewyan, or Rocky mountains, according to Mackenzie. All this country, from the Tennessee on the S., to the head waters of the St Lawrence on the N., has for its basis an immense stratum, or layer of limestone, disposed nearly in a horizontal direction, in laminæ or plates of one or more inches thick, of a smooth, close grain, and of a gray colour. This stratum, or layer, in its turn, rests in some places on a bed of clay, in others on gravel; and covered on the surface of the ground with a layer of excellent black mould, deepest in the river bottoms, where it is sometimes 15 feet thick; and shallowest on the rising grounds and heights, where it occasionally does not exceed six or eight inches. Besides this immense calcareous region, there are two calcareous districts worthy of notice as forming an exception in what was denominated the sandstone region, as being embosomed in the mountainous country, namely: the fertile valley of limestone, bounded by the lateral chains of the North mountain and the Blue ridge,—and another valley contiguous to that of Limestone, and extending along the back of Blue ridge on the east, from the gap made by the Patomac, to the vicinity of the Schuylkill, in the county of Lancaster.

Region of Sea-sand.] The region of sea-sand comprises the whole shore, from Sandy Hook, facing the granitic shore of Long island, as far as Florida. The whole of this region is bounded, inland, by a stratum or layer of talky granite, called foliated stone, or Muscovy glass, or isinglass, which runs constantly in the direction of the coast, that is, from N.E. to S.W. This talky ridge, everywhere—as Evans, an old American geographer, observes—marks its course by the falls, which it occasions in the rivers, before they reach the sea, and these falls are the extreme limits of the tide. This seam of mica, or rather talk, is from two to six miles broad. The land between it and the sea, varying in breadth from 30 to 100 miles, is evidently sand brought by the ocean, originally bounded by the talky ridge.

Alluvial Region.] The fifth is the alluvial region, which rises in gentle undulations from the talky ridge above mentioned, to the foot of the mountains of sandstone or granite. This tract is marked by its undulations, consisting in some places of isolated risings, in others, of ridges of little hills, as in North Carolina; and by its soil being composed of different kinds of earth and stones, sometimes jumbled together, and sometimes regularly stratified, which are interrupted, or succeed each other, several times, from the coast to the mountains; but constantly exhibiting the marks of matter rolled down from the declivities above by the waters, and this is in fact the origin of all this country. This is not at all surprising, if we consider the number and magnitude of the rivers that descend from the Alleghanies to the sea; and reflect that most of them are from 1200 to 4000 yards broad, and from 20 to 50 feet deep, long before they reach their mouths; and that, in their annual inundations, they sometimes overflow the flat country, to the depth of 20 feet. It is easy to conceive, that prodigious changes must, in the lapse of ages, have been made in the interval between the mountains and the sea, by such masses of water; and that the changes must have been also much more rapid than now, when

the interjacent space is much more elevated, by the depositions brought down from the high grounds, thus rendering the action of the waters less forcible. This tract of river alluvions extends from the Hudson to the Mississippi; gradually enlarging in its progress, as the mountains recede from the coast, or region of talky granite; covers all the delta of the Missouri; and slowly contracts its dimensions as it ascends this river, till it finally disappears above the confluence with the Illinois. It varies in breadth from 10 to 200 miles.[1] The country to the west of the Missouri has been very imperfectly explored, and therefore little is known of its internal structure. It appears, however, to have a great portion of alluvial land.

Natural Curiosities.] The natural curiosities of North America chiefly consist of falls and cascades, of petrifactions, of mammoths' bones, and caverns. The irruption of the Patomac through the Blue mountains is a very sublime object; but sinks into insignificance when compared with the Gates of the Missouri, already described, or the passage of the Tunguragua through the Andes.

The natural bridge in Virginia is at once sublime and curious. A rugged chasm on the side of a hill rises almost perpendicularly to the height

[1] No river gives such evident proofs of the effects produced by the agency of water as the Mississippi (Missouri). In the course of 80 years, that is, from 1720 to 1800, it has encroached 15 miles on the sea; and thus, under the eye of three generations, has created a new country at its mouth, which it is constantly increasing, and in which it lays up beds of coal for future generations. Such is the celerity of this process, that, at New Orleans, a canal cut by the governor, Baron Carondelet, when under the power of France, from the river to Lake Pontchartrain, brought to view an interior bed of earth, formed entirely of black mud and logs heaped together, several feet deep, which had not had time sufficient either to rot, or to be converted into coal. Both banks of the river consist wholly of trunks of trees, thus agglutinated by mud, for several hundred miles, and heaped to such a height by the waters, as to form a mound from 12 to 16 feet higher than the adjacent land. An interesting paper, in the *American Philosophical Journal*, by L. Bringier, Esq. of Louisiana, contains observations on the region of the Missouri, and shows clearly how thousands of square miles of land have been formed by the deposits of that river. The whole state of Louisiana is a country but just emerging from the water; and, as the Missouri is ascended, the banks of the river gradually rise and again descend towards the swamps. The Missouri in all its alluvial region may be considered as a river running on the top of a hill 24 feet in its highest position; the base is three miles in its average diameter, and reposes on the swamps, which are above 9 feet above the marshes, on the sea-shore, for a distance of 215 miles up the river. From all that has been explored of the Missouri river, it is evident that what has escaped over its banks in its overflowings never returns to it again. Hence some idea might perhaps be formed of the enormous beds of timber, leaves, and other substances spread over the plains by its waters, if it was but known how long the Missouri had been floating them over the lower country. This inference might be grounded upon the quantity consequently seen going into the Chiefalaya river, where several hundreds of miles are converted into solid rafts of wood, and these disappear every two or three years under beds of sand and leaves, by which the bed of Chiefalaya is alternately removed 4 or 5 miles to the E., or two or three to the W., but mostly to the E., where it has gained more than 10 miles since it became an outlet to the Mississippi. Lest any one should hear with incredulity of the enormous quantity of wood spread over the country inundated by the river Chiefalaya which receives it from the Mississippi, Mr Bringier observes, that he landed at the mouth of that river in 1812, (the river itself is but a mouth-branch of the Missouri) when it was at its fullest, and he counted the large trees which were perpetually carried into its current in a given time, and found them to be 8000 cubic feet a minute. To these may be added the leaves, bark, reeds, and muddy sediment, making on a moderate calculation 36 cubic miles of deposit annually. The beds of drift wood at the heads of the islands in the Mississippi will give some idea of the quantity of wood brought down the stream of that river. The large raft at Red river is 60 miles in length, and in many places 15 in breadth, and in some places composed of pines heaped together, and in others of cedars matted together with their leaves into compact rafts. Hence mineral coal and bituminous bodies are, no doubt, formed. Under this raft numerous small streams disappear, and show themselves again several miles off. A vast portion of land is no doubt formed in this way, and that part of America is gradually rising to a higher level.

of 205 feet. Over this a stupendous arch has been thrown by nature's own hand, formed of limestone rock covered with earth which nourishes several large trees. The width of the chasm at the top is 90 feet, and 45 feet at the bottom.

Rattlesnake Hill, in New Hampshire, presents a stalactitic cave; and near Durham, in the same state, is a rock, weighing 60 tons, so poised on another, as to be moved with one's finger. This in England would be called a druidical monument, and attributed to the ingenuity and force of mechanical powers used by the druids; but surely none will pretend that there were druids in America. Mr Bryant mentions another stone, or rather rock of the very same description, in the island of Amoy, off the coast of Fokein, in China.

In Maryland there are several remarkable caves. Others occur in Virginia, particularly that called *Maddison's cave*, on the N.W. side of the Blue mountains, extending about 300 feet into the solid limestone. The *Blowing cave* emits a strong current of air, especially in frosty weather. Kentucky abounds in curiosities of this kind; the stratum of this state being wholly limestone rock, which is easily wasted by the constant attrition of the rivers and rivulets. In some of these caves—if we can believe Imlay—a person may travel several miles under a fine limestone rock, supported by curious arches and pillars, and in most of them runs a stream of water. There is a most remarkable cave near the Green river in Kentucky, the entrance to which is by a pit 40 feet deep, and 120 in circumference. At the bottom of this pit is the mouth of the cave, which is open to the N., and is from 40 to 50 feet in height, and 30 in width, for upwards of 40 rods, when it becomes not more than 10 feet wide and 5 feet high. "However," says Dr Wood, "this continues but a short distance, when it expands to 30 or 40 feet in width, and is about 20 feet in height, for about one mile, until you come to the first *hopper*, where saltpetre is manufactured. Thence it is about 40 feet in width and 80 in height, till you arrive at the second hopper, two miles from the mouth. The loose limestone has been laid up into handsome walls on either side, almost the whole distance from the entrance to the second hopper. The road is hard, and as smooth as a flag pavement. The walls of the cavern are perpendicular in every passage that I traversed; the arches are regular in every part, and have bid defiance even to earthquakes. As you advance into the cave, the avenue leads from the second hopper W. one mile, then S.W. to the chief city, which is 6 miles distance from the entrance. This avenue is from 60 to 100 feet high, and about the same broad, the whole distance from the second hopper, until you come to the cross roads or chief city; and is nearly upon a level, the floor or bottom being covered with loose limestone and saltpetre earth. When I reached the immense area (chief city,) containing upward of 8 acres, without a single pillar to support the arch, which is entire over the whole, I was struck dumb with astonishment, and can give but a very faint idea of this chief city. Nothing under heaven can be more sublime and grand than this place, covered with one solid arch, at least 100 feet in height, and to all appearance entire. After entering the chief city, I perceived five avenues leading out of it, from 60 to 100 feet in width, and from 40 to 80 in height. The walls (all of stone) are arched, being from 40 to 80 feet of perpendicular height, before the arch commences."[2]

[2] "The next avenue which I traversed, after cutting arrows on the stones under our feet, pointing to the mouth of the cave," continues the same author, part of whose de-

Indian Forts.] In many parts of the United States, as on the Muskingum, that branch of the Great Scioto called Paint Creek, the Scioto,

scription we have quoted in our text, "was one that led us in a southerly direction for more than two miles. We then left it, and took another that led us E., then N., more than two miles farther; and at last, in our windings, were brought out by another avenue into the chief city again, after having traversed more than five miles through different avenues. We rested ourselves for a few minutes on some limestone strata near the centre of this gloomy area, and having refreshed ourselves, and trimmed our lamps, again took our departure through an avenue almost due N., and parallel with the avenue leading from the chief city to the mouth of the cave, which we continued for more than two miles, when we entered the second city. This is covered with one arch, nearly 200 feet high in the centre, and very similar to the chief city, except in the number of avenues leading from it, this having but two. We passed through it over a very considerable rise in the centre, and descended through an avenue bearing to the E. about 300 rods, when we came upon a third area, about 100 feet square and 50 in height, which had a pure and delightful stream of water, issuing from the side of the wall, about 30 feet high, and which fell upon some broken stones, and was afterwards entirely lost to our view. After passing this beautiful sheet of water a few yards, we came to the end of this passage. We then returned about 100 yards, and entered a small avenue (over a considerable mass of stone) to our right, which led us S., through an uncommonly black avenue, something more than a mile, when we ascended a very steep eminence, about 60 yards, which carried us within the walls of a fourth city, which is not inferior to the second city, having an arch that covers at least six acres. In this last avenue, the farther end of which must be at least four miles from the chief city, and ten from the mouth of the cave, are 20 large piles of saltpetre earth on one side of the avenue, and broken limestone heaped up on the other, evidently the work of human hands. I had expected, from the course of my needle, that this avenue would have carried us round to the chief city; but was sadly disappointed when I found the end a few hundred yards from the fourth city, which caused us to retrace our steps; and not having been so particular in marking the different entrances as I ought, we were very much bewildered, and once completely lost for 15 or 20 minutes.

"At length we found our way; and, weary and faint, entered the chief city at ten at night; however, much fatigued as I was, I determined to explore the cavern as long as my lights held out. We now entered the fifth and last avenue from the chief city, which carried us S.E. about 900 yards, when we entered the fifth city, whose arch covers upwards of four acres of level ground, strewed with broken limestone. Fire beds of uncommon size, with brands of cane lying around them, are interspersed throughout this city. We crossed over to the opposite side, and entered an avenue that carried us E. about 250 rods; when finding nothing remarkable in this passage, we turned back, and crossed a massy pile of limestone in the mouth of a large avenue, which I noticed but a few yards from this last mentioned city as I came out of it. After some difficulty in passing over this mass of limestone, we entered a large avenue, whose walls were the most perfect of any that we had seen, running almost due S. for 500 rods, and very level and straight. When at the end of this avenue, and while I was sketching a plan of the cave, one of my guides, who had been sometime groping among the broken stones, called out, requesting me to follow him. I gathered up my papers and compass, and also giving the guide who sat with me orders to remain where he was, until we returned, and moreover to keep his lamp in good order, I followed after the first, who had entered a vertical passage just large enough to admit his body. We continued to step from one stone to another, until at last, after much difficulty, from the smallness of the passage, which is about 40 feet in height, we entered upon the side of a chamber 1800 feet in circumference, and whose arch is 150 feet high in the centre. After having marked arrows (pointing downwards) upon the slate stones around the little passage through which we had winded, we walked nearly to the centre of this area. It was past midnight when I entered this chamber of eternal darkness, where 'all things are hush'd, and nature's self lies dead;' I must acknowledge I felt a shivering horror at my situation, when I looked back upon the different avenues through which I had passed, since I entered the cave at eight in the morning; and 'at time of night when church-yards groan,' to be buried several miles in the dark recesses of this awful cavern, the grave, perhaps, of thousands of human beings—gave me no very pleasant emotions. With the guide who was now with me, I took the only avenue leading from this chamber, and traversed it for the distance of a mile in a northerly direction, when my lamps forbade me going any farther, as they were nearly exhausted. The avenue, or passage was as large as any that we had entered; and how far we might have entered, had our lights held out, is unknown. It is supposed by all who have any knowledge of this cave, that Green river, a stream navigable several hundred miles, passes over three branches of this cave. It was nearly one o'clock in the morning when we descended the passage of the chimney, as it is called, to the guide who sat on the rocks. He was quite alarmed at our long absence, and was heard by us a long time before we reached the passage to descend to him hallooing with all his might, fearing we had lost our track in the ruins above. Very near the vertical passage, and not far

Great Miami, and along the Ohio, are found the remains of works, which have every appearance of having been constructed by some nation or people

from where I had left my guide sitting, I found some very beautiful specimens of soda, which I brought out with me. We returned over piles of saltpetre earth and fire beds, out of one avenue into another, until at last, with great fatigue and a dim light, we entered the walls of the chief city; where, for the last time, we trimmed our lamps, and entered the spacious avenue that leads to the second hopper. I found, when in the last mentioned large avenue, or upper chamber, many curiosities; such as Glauber salts, Epsom salts, flint, yellow ochre, spar of different kinds, and some petrifactions, which I brought out, together with the mummy, which was found at the second hopper. We happily arrived at the mouth of the cave at five in the morning, nearly exhausted and worn down with 19 hours' continued fatigue. I have described to you hardly one half of the cave, as the avenues between the mouth of the cave and the second hopper have not been named. There is a passage in the main avenue, about 60 rods from the entrance, like that of a trap-door. By sliding aside a large flat stone, you can descend 16 or 18 feet into a very narrow defile, where the passage comes upon a level, and winds about in such a manner as to pass under the main passage, without having any communication with it; and at last opens into the large passages, just beyond the second hopper. It is called the Glauber salt room, from salts of that kind being found there. There is also the sick room, the bat room, and the flint room, all of which are large, and some of them quite long. The last that I shall mention, is a very winding avenue which branches off at the second hoppers, running W. and S.W. for more than two miles. This is called the haunted chamber, from the echo of the sound made in it. The arch of this avenue is very beautifully incrusted with limestone spar; and in many places the columns of spar are truly elegant, extending from the ceiling to the floor I discovered in this avenue a very high dome, in or near the centre of the arch, apparently 50 feet high, hung in rich drapery, festooned in the most fanciful manner for 6 or 8 feet above the hangings, and in colours the most rich and brilliant. The columns of spar and the stalactites in this chamber are extremely romantic in their appearance, with the reflection of one or two lights. There is a cellar formed of this spar, called Wilkins' armed chair, which is very large, standing in the middle of the avenue, and is encircled with many smaller ones. Columns of spar, fluted and studded with knobs of spar and stalactites, drapery of various colours, superbly festooned and hung in the most graceful manner, are shown with the greatest brilliancy from the reflection of lamps.

" A part of the haunted chamber lies directly over the bat room, which passes under it, without having any connexion with it. I was led into a very narrow defile on the left side of this chamber, and about 100 yards from Wilkins' armed chair, over the side of a smooth limestone rock ten or twelve feet, which we passed with much precaution, for had we slipped from our hold, we had gone to that ' bourne whence no traveller returns,' if I may judge from a cataract of water, whose dismal sound we heard at a very considerable distance in this pit, and nearly under us. However, we crossed in safety, clinging fast to the wall, and winding under the haunted chamber, and through a very narrow passage for 30 or 40 yards, when our course was west, and the passage 20 or 30 feet in width, and from 10 to 18 high, for more than a mile. The air was pure and delightful in this, as well as in other parts of the cave. At the farther end of this avenue, we came upon a reservoir of water, very clear and delightful to the taste, apparently having neither inlet nor outlet. Within a few yards of this reservoir of water, on the right hand of the cave, there is an avenue leading to the north-west. We had entered it but 40 feet, when we came to several columns of the most brilliant spar, 60 or 70 feet in height, and almost perpendicular, which stand in basins ot water, that comes trickling down their sides, then passes off silently from the basin, and enters the cavities of stone, without being seen again. These columns of spar, and the basins they rest in, for splendour and beauty, surpass every similar work of art I ever saw. We passed by these columns, and entered a small but beautiful chamber, whose walls were about 20 feet apart, and the arch not more than 7 feet high, white as white wash could have made it: the floor was level as far as I could see, which was not a great distance, as I found many pit holes in my path, that appeared to have been lately sunk, and which induced me to return. We returned by the beautiful pool of water, which is called the pool of Clitorius, after the *Fons Clitorius* of the classics, which was so pure and delightful to the taste, that after drinking of it a person had no longer a taste for wine. On our way back to the narrow defile, I found some difficulty in keeping my lights, for the bats were so numerous and continually in our faces, that it was next to impossible to get along in safety. I brought this trouble on myself by my own want of foresight, for as we were moving on, I noticed a large number of these bats hanging by their hind legs to the arch, which was not a foot higher than my head. I took my cane and gave a sweep the whole length of it, when down they fell; but soon, like so many imps, they tormented us until we reached the narrow defile, when they left us. We returned by Wilkins' armed chair, and back to the second Hopper, where I found the mummy before mentioned, and which had been placed there by Mr Wilkins, for preservation in another cave.

very different from the present Indian tribes, and which had attained some degree of civilization or refinement. Similar works were found by captain Lewis about 1000 miles up the Missouri; as also, from report, up the Platte, Kanzas, and Yankton rivers. The Indians themselves have no idea how, when, or by whom these works were erected; nor is there so much as a single tradition amongst them respecting the origin of these ancient fortifications.—On the French Broad river, a branch of the Tennessee, are perpendicular rocks, on which, more than 100 feet above the present high water mark, are artificial characters of beasts, birds, &c.

Canals.] The following table presents a tolerably correct account of the various canals in operation within the Union in 1831; but there is also probably not less than 1000 miles more in progress, or on the point of commencement, in the different states:—

States.	*Canals.*	*Miles.*
Maine	Oxford, . .	30
Mass.	Middlesex, .	28
—	Hadley, . .	3
—	Montague, .	2
—	Pawtucket, . .	2
R. Island	Blackstone, .	45
Conn.	Farmington, . .	87
N. York	Erie, . .	363
—	Champlain, . .	63
—	Oswego, . .	40
—	Cayuga and Seneca,	20
—	Hudson and Delaware,	81
N. Jersey	Morris, . .	100
Penn.	Schuylkill Navigation,	108
—	Union, . .	83
—	Lackawaxen, .	43
Penn.	Lehigh, . .	46
—	Conostoga Navigation,	18
—	State canals, about	420
Delaware	Del. and Chesapeake,	14
Maryland	Port Deposit, .	10
—	Chesapeake and Ohio,	60
Ohio	Ohio, . .	86
—	Dayton, . .	67
Georgia	Ogeche and Altamaha,	16
S. Carolina	Winyaw, .	10
—	Santee, . .	30
N. Carolina	Dismal swamp, .	23
—	Lake Drummond, .	7
	Total,	2126

Medicinal Waters and Hot Springs.] Of these, there are several in different parts of the United States; but none of distinguished eminence. In Vermont, there is a remarkable sulphureous spring, which dries up in two or three years, and bursts out in another place. There are several mineral springs in Massachusetts; and there is another near Stafford in Connecticut. Those of Saratoga County are very copious and powerful, and the most celebrated in all the United States. These springs are in the township of *Ballstown*, 200 miles N. of New York, and 36 miles above Albany; they are eight or nine in number, and situated on the margin of a marsh formed by a branch of Kayadarossora Creek, 12 miles W. from the confluence of Fish Creek and Hudson's river. They contain iron, mineral alkali, salt, and lime; and abound in carbonic acid gas. According to Morse, they are brisk and sparkling like champaign. In drinking, they affect the nose and palate like bottled beer; and slightly affect the heads of some people, by their inebriating quality. When used instead of yeast in bread, they make it rise more speedily and effectually than any other ferment in ordinary use. Horses drink these waters with avidity; fish and frogs are very soon killed in them; and geese and ducks can only swim a few minutes before they expire. These waters, though in constant agitation as if boiling in a pot, are nevertheless extremely cold. They are cathartic, diuretic, and sudorific; and are as much frequented by invalids, voluptuaries, and fashionables, from all quarters of the United States, as the waters of Bath in England. The medicinal waters of *New Lebanon*, in the same state, are likewise much frequented. New Jersey also boasts of some medicinal springs. In the western part of Pennsylvania, there is a creek called *Oil Creek*, which empties itself into the Ohio. It issues

from a spring, on the surface of which floats an oil similar to that called the Barbadoes tar; and from which one man may gather several gallons in a day. It is a species of petroleum, and is useful in rheumatic complaints; when drunk, the waters operate as a gentle purgative. There are several medicinal springs in Virginia. Two of these springs are found at the head of James' river, one called the *Warm spring*, and the other the *Hot spring*, from their different temperatures. The waters of the Warm spring, which fill a pool 30 feet in diameter, are of the vital heat, or 96° of Fahrenheit. The Hot spring raises the mercury to 112°, and has been sometimes so hot as to boil an egg. The *Sweet springs* are in the county of Botetourt, at the eastern foot of the Alleghanies, 42 miles W. of the warm springs. Their water is cold. Several bituminous springs occur near the Great Kanhaway, and Big Sandy river. When a burning torch is applied to one of these, within 18 inches of the mouth, the vapour takes fire, and a column of flame is formed resembling that produced by ardent spirits, 18 inches in diameter, and four or five feet high. It sometimes burns out in 20 minutes; at other times it has been known to last three days. The smell is like that of pit-coal. The hot springs of *Ouachilla* on a branch of Washitaw, rises in Clark County territory of Arkansaw, are more copious and powerful than any other in the United States. They were visited and subjected to chemical analysis, by Dr Hunter and Mr Dunbar, in January, 1805. They are situated on the margin of Hot Spring creek, about two leagues above its entrance into the Washitaw; and issuing, one excepted, at an elevation of about 10 feet above the level of the creek, from a conical hill, which rises to the height of 300 feet, composed principally of silicious-rock and freestone, covered with a luxuriant growth of vines. The water of these springs is so hot, that it cannot be touched with the fingers, or tasted by the lips, without scalding; and the taste does not differ from that of good water, rendered hot by culinary fire. The temperature of the four principal springs was the following: No. 1, 150° of Fahrenheit's thermometer; No. 2, 154°; No. 3, 136°; No. 4, 132°. The temperature of other two springs was 140° and 130° of Fahrenheit, respectively.

CHAP. III.—CLIMATE—SOIL AND PRODUCTIONS.

In a country so extensive as that of the United States, there must be a great variety of climate. Were we to adopt the degrees of latitude as our rule in determining the temperature of the North American climate, the result would undoubtedly be greatly in its favour: the southern parts would have the same temperature as Morocco, Barbary, and Egypt,—the mouths of the Missouri corresponding with those of the Nile; while the New England states correspond with the south of France, the centre of Italy, and European Turkey. America, however, affords a striking instance of the fallacy of analogical reasoning, and proves that the temperature of any region is not determined by the circumstance of latitude alone, but that a number of other circumstances must be taken into the account, as modifying it, namely: the high or low situation of the country,—its being bare or woody,—its aspect,—and more particularly, the quantum and direction of its currents of air. The general characteristic of the American climate is its sudden transitions from extreme heat to extreme cold; but it may not be improper to consider it under four divisions, namely: 1*st*,

The cold climate, which includes the New England states, and the northern part of the state of New York; 2*d*, The middle climate, which applies to the central states, reaching from the sources of the Delaware and Susquehannah to the Patomac; 3*d*, The hot climate, including all the country south of the Patomac to the frontiers of East Florida; and 4*th*, The climate which is characteristic of the western country, or basin of the Missouri.

Northern Climate.] In the northern states, situated between 42° and 45°, and corresponding to the south of France and north of Spain, the ground is sufficiently covered with snow, for three or four months in winter, to make the use of sledges general during that period. In New Hampshire, they reckon upon having eight cold months in the year. The thermometer, at that season, varies from 8° or 10° to 18° below zero.[1]

The climate of the Genessee and Oneida tracts which lie to the south of Lake Ontario, though half a degree farther north than Albany, is much milder in winter than that of the latter on the east of the mountains, where no month of the year is exempt from frost, and where neither peaches nor cherries will ripen. The climate of the territory on the south of Lake Ontario is milder than that of Philadelphia, three degrees farther south; for the winter there does not generally exceed three months, nor do their snows last more than two months.

Captain Carver's assertion, that the climate to the W. of the Mississippi is much milder than that of the Atlantic coast in the same parallel of latitude, is to be taken with great restrictions. Beyond the parallel of 45° it is equally cold with its opposite parallels on the Atlantic coast. There the winter commences early in October with great severity; and beyond this parallel, as we advance westward, the cold increases rapidly in intensity.[2] The reason of this phenomenon can only be found in the very high

[1] Belknap has seen it himself, at 18¼ below 0°, at Portsmouth, north of Salem; and Williams has seen it 26° below 0°, or 58° below zero of Fahrenheit's scale, at Rutland, at the foot of the Green mountains, in N. lat. 43° 39′ 30″. At Salem, the difference between the extremes of heat and cold is 51°; while at Rome, it is only 24°; at Padua, 39°; and at Marseilles, 39°.

[2] Let the American party who ascended the river speak for themselves, and it will give us some faint notions of the severity of an American winter in this quarter. While in N. lat. 47° 21′, they thus journalized the weather:—Nov. 16,—Very hard white frost this morning; the trees wholly covered with ice."—"Dec. 8,—The thermometer stood at 12° below 0° (or 44° of Fahrenheit); wind N. W.; the air was filled with icy particles resembling snow; several of the hunters had their feet frost-bitten."—"Dec. 10,—Still exceeding cold, the thermometer being 11° below 0°, with a keen north wind. An experiment was made with proof spirits, which in 15 minutes froze into hard ice."—"Dec. 11,—The weather was so intensely cold that all the hunting parties were called in; the wind N.; the thermometer, at sunrise, stood at 21° below 0°; the ice in the atmosphere so thick as to render the weather hazy, and give the appearance of two suns reflecting one another."—"Dec. 12,—The wind still N.; the thermometer, at sunrise, 38° below 0°."—"Dec. 17,—Thermometer, at sunrise, 45° below 0°; and at 8 o'clock at night, it fell to 74° below the freezing point or 42° below zero of Fahrenheit."—"Jan. 10,—Night excessively cold; the thermometer, at sunrise, stood at 40° below 0°, or 72° below the freezing point: an Indian brought in with his feet frost-bitten."—"Jan. 13,—Thermometer, at sunrise, 34° below 0°. In the evening, a Frenchman, and one of our interpreters, returned from the Assiniboins, whither they had gone for furs, with their faces so badly frost-bitten that the skin came off; and their guide was so badly frozen that they were compelled to leave him with the Assiniboins."—"Jan. 14,—One of our hunters frost-bitten, but brought in next day to the fort, by horses sent for that purpose."—"Thermometer 25° below 0° at sunrise."—"Feb. 15,—At sunrise, the thermometer 16° below 0°. A Mandan chief returned with his eyesight so bad as to be unable to proceed. At this season of the year, the reflection from the ice and snow is so intense as to occasion almost total blindness. The only remedy for this very common disease, is to sweat the part affected, by holding the face over a hot stone, and receiving the fumes from snow thrown

elevation of this place, and the prevalence of the N.W. wind, which increases in intensity of cold as we advance westward, and blows from the frozen summits of the broad and lofty range of the Rocky mountains. No softening winds from the gulf of California on the S.W., or the Pacific on the W., exist to ameliorate or mitigate the cold; these being either chilled during their progress over these frozen summits, or arrested in their passage by the Mexican Alps, or on the ranges which form their N.W. continuation. Near the Rocky mountains, indeed, the S.W. wind is more cold and violent than that which comes from the N.W. The clouds rise suddenly near these mountains, and distribute their contents partially over the neighbouring plains. The same cloud will discharge hail alone in one part, hail and rain in another, and rain only in a third, and all within the space of a few miles; while at the same time it is snowing on the mountains.

The intensity of the summer heat in North America is equal to that of the cold in winter, reckoning from the summer solstice, or longest day. There are few years in which the heat does not rise at Salem as high as 30° and 31° R., which is the temperature of the Persian gulf and the Arabian coast. In other parts of New England, where observations have not been made, the heat is equally intense; and at Rutland, in Vermont, the quicksilver has risen to 27° Reaumur.

Central Climate.] The climate of the central states next claims our attention. Here the winters are shorter; but the cold is neither less rigorous nor less piercing. It commonly sets in about the shortest day, and continues very severe for six or seven weeks; but it begins to be felt as early as the end of October, although its duration has upon the whole decreased within the last 30 years. At Philadelphia, in 39° 55′ N. lat. or the same parallel with Madrid, Naples, and Valencia, and 1,100 B. miles to the S. of the parallel of Edinburgh, the thermometer is several days every winter at 8° and 10° below 0°.[3] The cold is then so piercing that, notwithstanding the motion of a tide which rises and falls 6 feet, the Delaware—which is here a mile broad—is frozen over in 24 hours, and continues in that state for 20, 30, and sometimes 40 days. The summer heats are equally intense as the winter cold. From the time of the summer solstice, and even for three weeks before, the heats are so oppressive at Philadelphia, that the streets are deserted from noon to 5 o'clock, and most of the inhabitants go to rest after dinner. At this season, Reaumur's thermometer will frequently rise to 25°, and even sometimes to 28° and 30°. Between the night and the day, the variation of the heat is eight degrees. But what renders the heat most insupportable is the almost total want of wind, particularly from three o'clock in the afternoon, and the moisture with which the air is loaded on all the coast; so that Volney says, he would infinitely prefer the heat of Grand Cairo, in Egypt, where a constant brisk wind and very dry air contribute to render the heat supportable, to that of Philadelphia. In New York, the thermometer never rises higher than 86° of Fahrenheit for 24 hours together, and the mean heat is 65°.

Southern Climate.] In the southern states, as Virginia, the Carolinas,

on it. At other times the weather was more moderate, but generally continued at 9°, 12°, 14°, 16°, 18°, and 20°, below 0°." From these extracts it appears that the cold is far more intense than in Lower Canada, where the lowest temperature is 28° below zero, or 60° of Fahrenheit's scale; whereas, at the Mandans, the low terms were 32°, 34°, 38°, 40°, and 45°, below the same point,—a degree of intensity of which we have no conception in our northern climate.

[3] In the two winters of 1796 and 1797, it stood at 17° and 18° below 0°, several successive days.

and Georgia, the intensity of the cold, and its duration, diminish in pretty regular proportion to the latitude. The course of the Patomac, or more precisely that of the Patapsco, forms a striking line of demarcation in this respect. Here the domain of snow terminates; and the traveller from the north, who has hitherto seen at every house a sledge, sees not another after he has descended the steep hill which overlooks that river. This coast has however pretty sharp attacks of frost during the 40 days succeeding the winter-solstice.[4] On the other hand, on all the coast beyond the Patomac, the heat, from a month before the longest day, is so great that the mercury, for the space of four months, commonly rises in the afternoon to 22° or 24° R. (or 82° and 86° Fahrenheit), notwithstanding a gentle sea-breeze.—It rises even to 32° and 33° at Savannah, which is much greater than in Egypt, where 25° R. (88° Fahrenheit) is the common term in the shade.

From the above facts, we have a scale of variation from heat to cold, in the northern states, of 60° or 66° R.; in the middle states, the variation is 46° or 48°; and in the southern states, 32° or 34° of the same scale. But it is not merely the great intensity of cold in winter and heat in summer that characterizes the climate of the American states, in the northern, middle, and southern parts. There is another peculiarity, and one which is very destructive of health, namely, its great and sudden variations along the whole tract east of the Alleghanies, and between them and the sea, but more particularly in the middle states. We are much accustomed, in this our humid climate, to talk and complain of the inconstancy of our weather and the variation of our temperature. But these are nothing, compared with those of the American maritime states. "In the course of the winter," says Dr Rush, of Philadelphia, "particularly in January and February, there frequently happen variations of 14, 18, and even 28 degrees of Fahrenheit from hot to cold, and from cold to hot, in less than 18 hours, by which the health is considerably injured. In 24 hours, between the 4th and 5th of February, 1788, the mercury fell 41½ degrees. At other times, the S. and S.E. winds, bringing on a heat of 54 and 58 degrees, occasion a sudden thaw; and this temperature lasting for some days, has induced premature vegetation, and occasioned peach trees to blossom in February; but as the cold does not really finish before April, frosts never fail to come on with N.E. and N.W. winds, which annihilate the untimely vegetation. Similar variations happen in summer, and piercing cold succeeds, almost every night, the violent diurnal heats. It is even observed, that the higher the mercury rises in the afternoon, the more it falls in the morning at daybreak. After a day in which the mercury has stood at 90, it sometimes falls in a single night down to 65°, or even 60°. The mercury descends generally from 80° to 68°; but when at 60°, only to 56°. These sudden variations occur particularly after storms of thunder and rain; and in 1775, the mercury fell 20 degrees in an hour and a half after such an occurrence. There are generally few nights in which a fire could be dispensed with, except in the months of July and August; and it is remarked as a singular, but to the agriculturist appalling fact, that frosts occur every month of the year, except July."—"It appears," says the same authority, in another place, "that the climate of Philadelphia is a compound of nearly all the

[4] At Norfolk, on the 16th of February, 1798, a snow, four feet deep, fell in one night; and even at Charleston, in N. lat. 32°, or the parallel of Morocco, the mercury falls to 2° below 0° (32° Fahrenheit), according to Rochefoucalt. and the ground freezes hard to the depth of 2 inches.

climates in the world. Here we have the moisture of Ireland, in spring; the heat of Africa, in summer; the temperature of Italy, in June; the sky of Egypt, in autumn; the cold and snows of Norway, and the ice of Holland, in winter; the tempests (in a certain degree) of the West Indies, in every season; and the variable winds and weather of Great Britain, in every month of the year." In confirmation of this variability, we shall only add one more authority. "I can affirm," say Volney, "that during a residence of three years, I never saw the same wind blow 30 hours together, nor the thermometer continue at the same degree for 10 hours.

Western Climate.] The climate of the western states, after making every reasonable deduction from the inflated statements of American writers, and European geographers who have implicitly followed them, is much more mild and genial, and much less subjected to the extremes of cold and heat, and those frequent and sudden variations which characterize the climates of the northern, middle, and southern states. As we advance westwardly from the sea to the mountains, the climate becomes gradually colder, on the very same parallel of latitude just as if we were proceeding northward. Having arrived at the summit of the Alleghanies, where the cold has attained its maximum, a change of temperature commences as we begin to descend, and continues in an opposite ratio till it becomes warmer on the shores of the Mississippi, than in the same latitude on the sea-coast. In 1799, when the thermometer was at Monticello at 90°, and 96° at Williamsburg, it was at 110° at Kaskaskias. This statement of Jefferson is confirmed by Volney, who remarks, that as he advanced westward to the mountainous country, he found vegetation proportionally later than on the sea-coast, and harvest more uniformly backward the higher he ascended. On descending the slope of the Alleghanies, the reverse took place, though not exactly with the same regularity as he found when ascending, in consequence of the greater diversity of levels and aspects, &c. Winter does not commence in the western states and territories till the approach of the solstice; and the cold weather is felt only in the six or seven weeks following; though even then it is not fixed and constant, as there are intervals of temperate and warm days. The thermometer does not in general fall lower than 19° or 21° Fahrenheit; the frosts which at first show themselves a few days in October disappear, but return again toward the end of November, though they do not become settled till towards January, when the brooks, small rivers, and standing waters, freeze, but seldom continue frozen over more than from 3 to 15 days.[5] The Wabash is frozen almost every winter, but only so from 3 to 15 days. Throughout Kentucky and the basin of the Ohio, the snow commonly remains only from 3 to 8 or 10 days, and seldom falls deep. Even in January, there are days really hot, the thermometer being at 15° or 18° above 0° of Reaumur, or 66° or 72° of Fahrenheit, with a S. or S.W.

[5] In the severe winter of 1796, when the mercury fell to 15° below 0°, the Alleghany, Monongahela, and Ohio, were frozen over from the 28th of November to 30th of January,—a space of 65 days; but this was considered as an instance without example. Still, however, the winter is severe. In one night, in 1808 and 1809, the Mississippi froze so solid and strong as to bear horses and carriages at St Genevieve next day. In January, 1805, the Mississippi was frozen to the depth of 22 inches at St Louis, 38° 36′ N. lat. In 1796, the Mississippi and Ohio, with their tributary streams, were frozen to their junction. The Mississippi was passable in 1802, 3, and 4, on the ice with horses and carriages, before the winter solstice. In three successive mornings the thermometer fell to 12° and 14° below zero, and in one morning of January it fell even to 18° below zero. The above facts evince a degree of cold, even in the western states, of which there is no experience in Europe in the same latitudes.

wind, and a clear bright sky. Spring brings on rain and showers, with N.E. and N.W. winds; but in about six weeks after the vernal equinox, the heats commence, and exist in all their intensity during the 60 or 70 days that succeed the summer solstice. The thermometer then keeps between 90° and 93° of Fahrenheit. During the whole of this season storms occur almost daily on the Ohio, producing an oppressive heat untempered by the rains. Throughout the year, the prevailing wind is the S.W. In the valley of the Kanhaway, this wind is hot and suffocating. It changes its direction according to the course of the Ohio, as it blows up the river; and prevails 10 months out of 12, leaving only two months for all the other winds put together. It is equally prevalent throughout Kentucky, but does not there produce the same effects; for while the valley of the Ohio, for 12 or 15 miles broad, has abundant rain and moisture, the rest of the country is parched with droughts. At the autumnal equinox rains come on, with winds from the N.E., S.E., and even N.W. The whole of the autumn is more serene, pleasant, and temperate, than the other two seasons; for, strictly speaking, throughout the continent of North America there is no spring. Such is the climate of Kentucky, and all the basin of the Ohio; and we must proceed as high as the Upper Mississippi, in N. lat. 45°, before we perceive any sensible difference in it. Even as high up as Niagara, it is still so temperate, that the cold does not continue with any intensity more than two months. In the state of Ohio, according to Fearon's account, the thermometer ranges from 85° to 105° of Fahrenheit in the months of July and August. On the S. this temperature extends no farther than the 35th degree of N. lat.; for beyond this, it is subjected to the same common law as that of the Atlantic states.[6]

Degree of Humidity.] The annual and mean quantity of rain that falls in the United States is much greater than in most countries of Europe, certain mountainous regions and heads of gulfs excepted. This has been ascertained by numerous and accurate observations made by intelligent Americans themselves on different parts of the Atlantic coast. No observations have as yet been made, to determine the annual and mean quantity of rain in the western states; the following table, therefore, is restricted to the eastern:

[6] This superior mildness of temperature is evinced by the experience of botanists; who, on comparing the places in which certain trees and plants grow spontaneously on the E. and W. of the Alleghanies, have discovered that there is a general and uniform difference, equivalent to 3 degrees of latitude, in favour of the climate of the western country; or in other words, that those trees and plants which require a warm climate, and less severe and shorter winters, are found 3 degrees farther N., on the W. of the Alleghanies, than to the E., on the Atlantic coast. Cotton, which is incapable of cultivation on the Atlantic coast, to the N. of 35° or 36°, succeeds at Cincinnati and Vincennes, in the latitude of 39°. Catalpas grow spontaneously on the Mississippi, as far as 37°; and reeds as far as 38°. Parroquets even winter on the Scioto, in N. lat. 39°. The cause of this superior mildness of temperature is attributed, by Volney, to the prevalence of the S.W. wind, which blows 10 months out of 12 up the Mississippi and Ohio; and consequently increases the heat of summer, and tempers the cold of winter, in the western territory. The genial influence of this wind has even been sensibly felt in Lower Canada, since the forests have been thinned, and the country has been settled on the borders of Lakes Erie and Ontario. Other circumstances also concur, with the influence of the S.W. wind, to render the climate on the W. of the Alleghanies more healthy than on the coast, namely, the superior altitude, and comparative absence of bogs and marshes. The ascent is much higher from the coast to the Alleghanies than the descent thence to the countries watered by the Ohio and Tennessee; and so much is the climate improved and changed by the mere circumstance of higher elevation, that its salubrity depends as much upon altitude as on latitude. So much is the temperature of Louisiana raised by the S.W. wind, during the four winter months, that notwithstanding the pretty frequent occurrence of N.N.W. and E. winds, the sugar-cane, particularly that of Otaheite, may be cultivated there.

	Inches.
At Charleston, according to Dr Ramsay, in 1795,	71.$\frac{4}{5}$
——— at a medium from 1750 to 1759,	41.$\frac{3}{4}$
——— from 1797 to 1807,	49.3
The greatest quantity in one of the years immediately above,	83.4
The least quantity in one of the years immediately above,	38.6
The greatest monthly quantity in any one of the 10 years immediately above,	12.9
At Williamsburg, Virginia, (Jefferson,)	47
At Cambridge, near Boston, (Williams,)	47$\frac{1}{2}$
At Andover, in Massachusetts, (ditto,)	51
At Salem, (ditto,)	35
At Rutland, in Vermont, (ditto,)	41
At Philadelphia,[15] (Rush,)	30

The hygrometer, at Charleston, shows an almost constant humidity in the air. For 7 years previous to 1809, it had not marked 24 dry days in any one year; and the average of the whole 7 years was less than 16 dry days for each. In Europe, on the contrary, the quantities of rain are only as follows:

	Inches.
Petersburg,	12$\frac{1}{2}$
Upsal,	15
Abo,	25$\frac{3}{5}$
London,	22$\frac{2}{5}$
Glasgow, on an average of 30 years preceding 1790,	29$\frac{1}{2}$
——— in 1775,	43$\frac{1}{2}$
——— 1788,	19$\frac{1}{4}$
——— 1805,	15$\frac{1}{2}$
——— 1815,	22$\frac{1}{2}$
Greenock,	36$\frac{1}{2}$
Paris,	21$\frac{2}{5}$
Utrecht,	28$\frac{4}{5}$
Marseilles,	21$\frac{2}{5}$
Rome,	30$\frac{2}{5}$
Naples,	37$\frac{2}{5}$
Algiers,	29$\frac{2}{5}$
Padua,	35$\frac{1}{5}$
Bologna,	25$\frac{2}{5}$
Vienna,	44$\frac{4}{5}$

The above comparative statement proves, that, on a medium, one-third less rain falls in Europe than in the United States; yet Dr Holyoke mentions, in his memoir on the climate of the United States, 20 cities in Europe which, at a mean of 20 years, have had 122 days of rain; while Cambridge, stated in the comparative table, has had but 88 days,—Salem 95 days of rain,—and Philadelphia 76 days,—at a medium of 20 years. The mean annual quantity of rain at Philadelphia is very little more than the mean annual quantity at Glasgow for a term of 30 years preceding 1790. The above greater quantity of rain, in fewer days, in America, indicates the rain to be much heavier there than in Europe. On the other hand, it is equally well ascertained, that the evaporation of these rains proceeds much quicker in America than in Europe; and that consequently the air is habitually drier, and less calm, unless Charleston be taken as an exception. It has been found, that the mean annual quantity of evapora-

[15] According to a register, in *Silliman's Journal*, of the weather, kept by Dr Darlington, during 10 years past, near Philadelphia, the average quantity of rain in that district is about 47 inches, and the maximum 54 inches.

tion at Cambridge, near Boston, was 56 inches, for a term of 7 years; while in 7 German and Italian cities, on a mean of 20 years, the annual evaporation was 49 inches, or 7 of difference; although the Italian cities are in a much more favourable situation for evaporation than the vicinity of Boston, adjacent to the Atlantic ocean. The same fact of greater evaporation was also observed to take place in Upper Louisiana, and along the higher Missouri, as far as the Rocky mountains, by captain Lewis. The habitual dryness of the American climate, increases as we advance W. and N.W. from the Missouri, where there frequently is not a drop of rain for 6 months. This is owing to the greater distance from any sea,—the superior elevation,—and the comparative want of timber, combined with the greater intensity and longer duration of the N.W. wind, which sweeps with unobstructed force over the naked plains. It appears, then, that more rain falls in fewer days, in America, than in Europe; and that there are fewer cloudy days, more fair days, and quicker evaporation. It is to this last circumstance we must ascribe those immense dews, unknown in European climates, which occur in America, and which are so copious in summer as to resemble heavy showers of rain. But it must also be observed, that dews are comparatively unknown in the tract watered by the Upper Missouri; and which in all probability is owing to the want of timber, wood being limited to the banks of the rivers, which are commonly bordered with trees. Our fine gentle showers are so rare in the United States, that the Americans call them English rains, or English weather. An additional proof of the dryness of the air, is the abundance of the electric fluid in this country; terrifying evidences of this are given in the loud claps of thunder, and the prodigious vividness of the flashes of lightning, of which we in Europe have no adequate conception.

Seasons.] There are, strictly speaking, only three seasons throughout the whole of North America: summer, autumn or fall, and winter. This last is not so early as in Europe; it does not really commence, nor is it permanently bad weather, till the middle of December, or a little before the shortest day; and it is preceded by several grand crises in the atmosphere, before a general change of temperature is accomplished by the N.E. or N.W. winds driving back those of the S. The first crisis is at the autumnal equinox, when the intense heat of summer is cooled by a general gale of wind, accompanied with rains, from some point between the N.W. and N.E. These rains are followed by frosts, which are confined to the N. of the Patapsco in the eastern and the Ohio in the western states; where, in the N. and among the mountains, they ripen the Indian corn, by divesting its ears of the thick husks, and thus exposing them to the full force of the solar rays. The S. and S.W. winds, however, soon return and restore the heat, which is sometimes as powerful as in summer, and produces the periodical appearance and occasional violence of autumnal fevers. The second grand crisis is ushered in about the middle of October, by the same wind which announced the first. With this come fresh rains, fresh evaporation, farther cooling, and a new period of frosts, which now extend as far as Georgia and Carolina, and winter announces itself over the whole continent; the frosts wither the leaves of the forests, and their verdure immediately assumes tints of violet, dull red, pale yellow, and dark brown, which, at this season, imparts to American landscapes a charm and splendour unknown to those of Europe. The N.E. and N.W. winds are now more prevalent, while the S.W. loses its power and declines towards the W.; the air becomes cooler, but the sun is always hot in the middle of

the day; and towards November a succession of fine days appear, which are denominated the *Indian summer*.[16] A third crisis, of greater length and obstinacy, appears at the end of November. Rains and frosts now increase; the leaves fall; and as the nights become longer, the earth grows colder, and the N.W. winds are fixed and stationary; but there are no fogs, as with us, for the sky is clear, particularly in the N. November and part of December pass away in alternate frosts and thaws. About the middle of the last mentioned month, frost and snows come on in New Hampshire and Vermont, and spread gradually, like a veil, as far as the highlands of New York. January frequently brings on a thaw, which is succeeded, however, by more intense cold. In February the greatest snows fall, and the most piercing cold is experienced. In March, or the approach of the vernal equinox, it is cold and tempestuous, with snowy blasts from the N.W. and N.E. The predominance of these winds at this period, combined with the coldness imparted to the earth by the snows, retard vegetation so much that April passes away and leaves the ground as bare as March. It is not till the beginning of May,—even in Virginia, in the latitude of 36° and 37°,—that the forests are re-clothed with foliage, though the solar rays are insufferably hot from the middle of April.[17] Hence it follows that there is no spring in America, but a sudden transition from severe cold to severe heat, with the incongruous circumstances of a freezing wind and a scorching sun, a winter-landscape and a summer-sky. When vegetation at last bursts forth, its progress is so rapid, that the flowers are quickly succeeded by the fruit, which latter also ripens more speedily than in Europe. At the time of the summer-solstice, the heats are most intense; but in August and September, they are more oppressive, on account of the calms that accompany them; and, if in either of these months, there be 3 weeks of dry weather, the heat is often so powerful, that, according to Rush, Belknap, and others, the woods are set on fire by it.[18] Such is the general routine of American seasons.

Very perceptible changes have taken place in the American climate, and have displayed themselves in proportion as the land has been cleared. These changes were long ago observed by different writers and travellers, from La Hontan, down to those of the present day.[19] They are to be ascribed to the clearing of the land, and the extensive openings made through the woods. The settler has scarcely cleared a few acres of the forest, before the ground, exposed to all the action of the solar rays, acquires, at the depth of near a foot, a heat of 10 or 12 degrees beyond that of the land still covered with wood. This was proved by several experi-

[16] This is what is called in France, *St Martin's summer;* and in England *Allhallow's summer.*

[17] The difference of seasons between Virginia and Canada, is not more than 10 days, for the leaves appear, even at Quebec, before the 15th of May, or only 25 days after the breaking up of the frost; so that the change of season is as if a carpet of verdure, or of hoar frost, were spread out, or rolled on a stage, 800 miles in extent.

[18] Volney rather inclines to doubt the truth of this, though the same facts are stated to take place in the woods of Sweden, much farther north.

[19] We are told by Williams, that the seasons are totally altered in New England since its first discovery,—that the weather is infinitely more variable, and the winter shorter, and interrupted by great and sudden thaws,—that spring now presents a perpetual fluctuation from hot to cold, and vice versa, extremely injurious to vegetation, —that the summer-heats are longer but less intense,—that autumn begins and ends later, and harvest is not finished before the first week in November,—and that, in fine, winter does not set in till the end of December, or a month later than when New England was first peopled. The same things are advanced by Dr Rush, with respect to Pennsylvania; and as regards Virginia by Jefferson; and are confirmed from the testimony of all the settlers in the western states.

ments, which Williams made for the purpose. Thus the same change is operating in America, as in Europe formerly, and other parts of the world. But though a change has taken place in the climate, it is questionable still whether it has improved; because, though the winters are shorter, the summers longer, and the autumns later, yet these advantages seem to be fully overbalanced by the increasing variations of the temperature, which are infinitely more injurious to the human constitution than long-continued cold or heat; and as the N.W. wind is the primary agent in producing cold, in this quarter of the globe, the cold, though of shorter duration, is still as intense as ever.

Soil and Produce.] In a country so extensive as that of the United States, every diversity of soil is to be found—from that which mocks the industry of man, up to the highest degree of fertility. Taken on a large scale, the soil may be divided into two principal parts perfectly distinct from each other, namely: the lands between the sea and the Alleghanies, and those beyond them. The lands bordering on the Atlantic are seldom good; whilst those west of the Alleghanies, in Lower and part of Upper Louisiana, are in general not exceeded by the best in Europe, and have besides the advantage of being nearly all virgin soil and easily cultivated. In the northern states, or those of New England, including Vermont, one description of trees predominating in each soil has originated the descriptive names of *oak-lands*, *chestnut-lands*, *pine-barrens*, *cedar-swamps*, &c. &c. The best lands produce walnut and chesnut; the next beech and oak; the third, fir and pitch pine; the fourth, whortleberry and barberry bushes; and the last or poorest produces nothing but marshy shrubs. The soil of the New England states is, however, much more adapted for grazing than for grain; and the former is pursued with great industry and success. The soil of the central states does not materially differ from that of the northern states, unless in the back parts of the state of New York, where it is much more productive, as in the Genessee, Onondaga, and Oneida tracts. The soil of the southern states is in general better than that of the central and northern states, except on the coast, where in many places almost absolute barrenness prevails. Wheat and tobacco are the chief articles of agricultural produce. But agriculture is in a miserable state in the southern districts; the labour is chiefly managed by slaves, and the plantations are by far too extensive to be well-cultivated.

But it is upon the climate and soil of the western states that the American writers love to dwell. According to them, there are no spots under the canopy of heaven that can vie with Kentucky, Tennessee, Ohio, or Indiana, for fertility of soil, variety of prospect, and salubrity of clime. The powers of language are exhausted by them in the attempt to find out terms sufficiently descriptive of the excellencies of this region. "Here," says an American writer, "an eternal verdure reigns; and the brilliant sun of lattitude 39° piercing through the azure heavens, produces, in this prolific soil, an early maturity which is truly astonishing. Flowers full and perfect, as if they had been cultivated by the hand of a florist, with all their captivating odours, and with all the variegated charms that colour and nature can produce, here, in the lap of elegance and beauty, decorate the smiling groves. Soft zephyrs gently breathe on sweets, and the inhaled air gives a voluptuous glow of health and vigour, that seems to ravish the intoxicated senses. The sweet songsters of the forests appear to feel the influence of this genial clime, and, in more soft and modulated tones, warble their tender notes in unison with love and nature. Every thing here gives delight;

and, in that mild effulgence which beams around us, we feel a glow of gratitude for that elevation our all-bountiful Creator has bestowed upon us." This romantic eulogy is closed with the following extraordinary peroration: "Far from being disgusted with man for his turpitude or depravity, we feel that dignity nature bestowed upon us at the creation, but which has been contaminated by the base alloy of meanness, the concomitant of European education; and what is more lamentable is, that it is the consequence of your very laws and government." From this hyperbolical rhapsody, it would seem that the western territory is a complete image of ancient Eden, and its climate that of paradise. It would also appear from this writer's conclusion, that not the fall, but European education, laws, and government, have brought man into a state of sin and misery; and that as the climate and soil of Kentucky are a complete and radical cure for all the disorders of our moral nature, it is the duty of every man, who wishes the renovation of his heart and affections, to repair thither with all possible speed. We must also infer, that from the beneficial nature of the climate and soil, the people of the western states will speedily become all righteous; and that nothing is awanting to complete the picture, but that immortality which is the concomitant of perfect virtue, and which makes its possessors, however old, look with a youthful vigour and autumnal green. Every man of discernment and piety will easily perceive that such statements as the above are gross exaggerations, and cannot possibly be true, nor be predicated of any territory on earth. It must be remembered, that the system of nature is adapted to the circumstances of a fallen, not of a perfect creature; and that no country has existed clothed with such superlative attributes, since the day that God cursed the ground for man's sake, and

> "Earth felt the wound, and nature, from her seat,
> Sighing through all her works, gave signs of woe
> That all was lost."——————

The fact is, that self-interest lies at the bottom of all these pompous and inflated descriptions of the western territory: it is a country which Congress has for sale, and which they, in conjunction with a vast herd of land speculators, wish to sell as soon and as advantageously as possible. Land-jobbing is the rage which in America has seized every class of individuals. The grave theologian, the wrangling lawyer, the philosophic sage, and the fierce politician, are equally interested in this traffic; and as the paradise in question is removed at a vast distance from Europe, a man of discernment, though perfectly sensible that the panegyric is too unlimited to be true, yet cannot distinguish that part of the description which is true from that which is false, unless at the expense of a voyage across the Atlantic, and a toilsome march of several hundred miles through forests, which, thickening at every step of his progress, present an appearance as unlike an Eden as any thing possibly can be. Abating, however, from these interested exaggerations, the soil of the western territory is vastly superior to that of the Atlantic states. Its fertility is attested by the great vegetative power of the forests; the trees grow closer, and are of larger dimensions both as to height and diameter, and their species much more varied than in the Atlantic states. But nothing in all the western territory equals in fertility the banks of the Ohio, where the soil is a true vegetable earth, produced by the thick bed of leaves which are annually collected on the ground, and soon converted into mould by the humidity prevalent in these sequestered

forests. The best lands in Kentucky and Western Tennessee yield very abundant harvests; but there the trees do not attain a bulk or an elevation comparable to those on the Ohio. There are no stony substances to be found on the the banks of this river below Pittsburg, with the exception of some large detached stones of a gray colour, and soft, which are observed in a space of ten or twelve miles below Wheeling, the whole being vegetable earth. The great preliminary to the enjoyment of this fine country is the clearing of the immense forests, the trees of which must be cut down one by one, and burned, and the land brought in with great toil and considerable cost: and even after the land has been cleared, it is some time before it can be deemed a safe abode in point of health.

As to the soil of the Missouri states and Lower and Upper Louisiana, our knowledge is very limited. The settlement of the Natches is said to produce tobacco in greater plenty, and of much superior strength to that of the southern Atlantic states. But the great staples are said to be sugar and cotton—the latter of the same species with the Sea Island cotton. A great part, however, of the soil of the interior is represented as sandy and poor, partly covered with pines, and ill adapted for any species of culture. The country inhabited by the Creek Indians is the best and most productive. That which is watered by the Tennessee is very fertile, and superior to the best lands in the states of Tennessee and Kentucky. The country of the Choctaws is also said to be very good; but that of the Chickasaws is a high arid plain, with little water, and that of a bad quality. The northern part, as far as the Ohio, is hilly. In Louisiana two annual crops of Indian corn, as well as rice, may be obtained; and in the vicinity of the Great river, fruits are furnished in the greatest variety. The soil seems peculiarly fitted for hemp, flax, and tobacco; and indigo is a staple commodity, which in respect of quality and produce, far excels that raised in the lower Carolinas, yielding the planter at an average three or four cuttings annually. It is likewise admirably suited for the cultivation of the vine; but the colonists were prohibited by very severe penalties, when in the hands of the French, from pursuing this species of cultivation, lest it should interfere with the interests of the parent state. Wines, however, of most excellent quality and variety, were, in spite of these restraints, prepared for domestic use. The cultivation of silk, also, might be prosecuted with success, as the woods abound in mulberry trees, which support great numbers of silk-worms in their wild undomesticated state. The soil on the banks of the Red river, as far as Natchitoches, is a rich fat earth, producing a most luxuriant vegetation. The same is the case with that on the banks of the Washita, where it is a black vegetable mould of 18 inches thick.

Nature has marked with a discriminating hand the boundaries between Upper and Lower Louisiana, by the disappearance of that species of long moss, called the *tclandsia*, in the 33d degree of N. lat. Its growth is limited to within 10 miles S. of the settlement on the Arkansaw. The land bordering on this river, for several hundred miles, is amazingly productive. Of all the countries ever visited by the footsteps of civilized man, there is none that ever produced game in such abundance as the borders of this river, which supply with food (in Pike's opinion) more buffaloes, elk, and deer, than would be sufficient to support all the savages of the United States for one century. On this account, the tract above mentioned has been denominated the Paradise of the Savages. From the Arkansaw northward, along the course of the Great Osage, the soil is said

to be equally fertile. Up the banks of the Missouri, as far as the confluence of the river Platte—a space of above 600 miles by the windings of the river —the land is well timbered, and esteemed among the best in America, in point of fertility. The soil is a deep black vegetable mould. Up the Platte, it is still richer, and has the advantage of better and more abundant streams of water. Between the Osage and the Kanzas rivers, the soil is preferable to any in the United States, if taken in connection with the climate, for the purpose of settling. Beyond the junction of the Platte and the Missouri, though the soil is still rich, yet the comparative scarcity of timber, combined with the want of good water—of which there is but a small quantity in the creeks, and even that brackish—oppose powerful obstacles to its settlement. The case becomes still worse between the Muscleshell river and the Great Falls, where the soil is less fertile, and the timber still scarcer. Up the Jaune and Bighorn rivers, the soil is of the first quality, well-timbered, and covered with innumerable herds of gregarious animals. The soil of Jefferson valley is represented as excellent, well-timbered, and watered by a number of fructifying streams, throughout its whole extent of 50 miles by 15 broad.

The soil of the Illinois territory is equal to any that occurs in the western states, producing wheat, maize, pease, pulse, and every species of grain that is raised in any of the old colonies. Hemp is a spontaneous production here, growing to the height of 10 feet, and 3 inches in thickness. Flax is also an indigenous production of this soil. Fruits, in the greatest abundance and variety, succeed here; and the immense savannahs stretching S.E. to the Wabash, are crowned with the richest verdure, and prolific in gramina.

Agriculture.] All the southern, western, and part of the central states, are supplied with butter and cheese from the New England states, as dairy farming is comparatively unknown in the rest of the United States. Vast numbers of black cattle, horses, asses, and mules, are reared here, partly for labour, and partly for exportation to other parts of the United States; the mules are chiefly exported to the West Indies, where they bring a handsome profit. Much attention has been also paid to the rearing of sheep; but the cold is rather unfavourable to this pursuit, as all the cattle are obliged to be housed from November till May. The kind and quantity of agricultural produce, is much the same throughout the whole of the northern states; but it is the advantage of these states, that the farmers are generally more intelligent, industrious, and economical, than in any of the other states, and the system of agriculture is pursued on a much better plan. The farms are generally small, when compared with those of the southern states, which from this circumstance are not half-cultivated; whereas those of the northern states only consist of from 50 to 100 acres, and of two or three ploughs each, which are managed with the greatest economy in men and horses, in such a manner, that with all the comparative infertility of the soil, a considerable quantity of grain remains for exportation. The science of agriculture, however, is much less understood in the central states than in the New England states. Wheat is the staple article. Pennsylvania is also a good grazing country, where large dairies are kept. The Virginian and Carolinian planters do not obtain from their plantations the half of what they ought to yield. The richness of the staple compensating for the small quantity of the productions, the southern planters prefer their own agricultural system (similar to that of the West Indies) to that of the northern states, which is more conformable to the

European method. The cultivation of the tobacco-plant, so little beneficial to mankind at large, is much more troublesome than that of wheat, and infinitely prejudicial to the soil. The most fertile soils are soon impoverished by its deleterious influence; and it may perhaps be owing to the extensive cultivation of tobacco, that the soil of Virginia is said to be now no more than moderately good, and no longer capable of producing such immense quantities of that plant as formerly. More attention, of course, has of late years been paid to rearing wheat; which, though not so immediately lucrative as that of rearing tobacco, is much more beneficial to society. But still, as the wheat is to be raised from an exhausted soil, the produce cannot be equal to that even of the central and northern states. The system of slave-labour is vastly prejudicial both to the population and agriculture of the southern states.[20] It may be farther remarked, that in the southern Atlantic states, the kind of agricultural produce is almost entirely regulated by the foreign demand, and but in a very small degree by that of the interior country. An immediate lucrative return is the great object of pursuit, whatever may be its ultimate consequences with respect to the soil, or however unfit the soil may be to the rearing of the article in demand. At one time, the soil is devoted almost exclusively to the cultivation of tobacco; at another time, to the cultivation of rice; at another time, to the cultivation of wheat and Indian corn; at another time, to that of indigo; and finally, to that of sugar and cotton. The moment that any one of these articles have become scarce in the continent of Europe, and of consequence has given rise to an increased demand and an advanced price, a change directly takes place; and what was before cultivated as the staple commodity, is now given up, and every planter vies with another who shall raise most of the new article in present demand. And what adds force to the disease, and impedes agricultural improvement, is the comparatively low value of land. No sooner is the soil exhausted, than new land is cleared; the American in the southern states never thinks of a rotation of crops, or of manure to repair the exhaustion of the soil; or of artificial irrigating canals to refresh the thirsty earth; but directly buys new ground, clears it, and cultivates it in like manner, till it shares the fate of the former; and this process goes on, till settled habits are destroyed, attachment to the soil eradicated, and the American farmers become like the pastoral tribes,—a race of nomades, moving from place to place.

Cotton.] The soil most proper for the cultivation of cotton is found

[20] What the Duke de Rochefoucault has remarked with respect to Maryland, may be extended to all those states where slavery exists. "In a country abounding in slaves," says he, "the whites do not apply much to labour. Their ambition consists in buying negroes, and these are bought with the first sum of money they get. When they have two of them, they leave off working themselves; and this small number is not sufficient to keep their lands in good order according to the tillage of the country, bad as that may be. The small farmers among the whites, thus abandoning labour, augment their expenses, and their affairs are soon in a bad condition. These, and such as had never been able to purchase negroes, find themselves in an inferior condition to their neighbours who have many slaves. Displeased, consequently, with their situation, they soon think of establishing themselves in a country where land is cheaper, and where they shall not be so much surpassed by proprietors so disproportionally richer than themselves. So that all these small farms, the supporting of which becomes every year more chargeable because the wood for making the fences for inclosure is more scarce, and hand labour higher, are put to sale, and are bought by rich planters; and those who have sold them remove to Tennessee, Kentucky, and the other western settlements. By this, Maryland does not gain in agricultural improvement what it loses in population; its lands are not better managed; their produce is not increased, but frequently diminished, because the purchaser of them looks rather at a good foundation for his property; or in other words, an augmentation of it, than an increase of revenue."

in the islands lying on the coast. Those belonging to the state of Georgia produce the best, known in France by the name of *Georgia cotton*, and in Great Britain by the name of *Sea Island cotton*. This variety of cotton has a deep black seed, and very fine long wool, which is easily separated from the seed by the roller gins, which do not injure the staple. In the middle and upper country, the green seed or inferior cotton is produced; this kind is less silky, and adheres so tenaciously to the seed, that it cannot be separated without the action of a saw-gin. Though the wool of the green seed, or *bowed* Georgia cotton, be cheaper than the other, yet its produce is more luxuriant. An acre, which will produce 150 lbs. of black seed cotton, will generally yield 200 lbs. of the green seed kind. The packing of the cotton is done in large canvass bags, which must be wetted as the cotton is put in, that it may not hang to the cloth, and may slide better down. The bag is suspended between two trees, posts, or beams; and a negro, with his feet, stamps it down. These bags are generally made to contain from 350 lbs. to 400 lbs. each.

Tobacco.] As tobacco is another staple article of the southern states, we cannot avoid making a few observations on its mode of culture. There are at present but two sorts of tobacco raised in the western states: the one with a long and sharp pointed leaf,—and the other with a round and hairy leaf, which is evidently the best tobacco. The seed is sown in beds well prepared for the purpose, so that in May it is fit to be transplanted. The plants are then put into another piece of ground, at intervals of from three to four feet; they are carefully freed from weeds, and the earth is drawn up to their stems. When they have obtained a certain growth, the tops are taken off, that the remaining leaves may acquire a proper size; worms are carefully removed, and no sucker is allowed to remain. In August, the plants become spotted, and appear of a brownish colour; by these tokens they are discerned to be ripe, and are therefore immediately pulled. They lie one night to sweat; next day they are hung up to dry: when the tobacco has become sufficiently dry to ensure its preservation, it is stripped from the stalks, and barrelled up for exportation; or manufactured into various shapes, for those whom a species of luxury has taught to look upon it as almost one of the necessaries of life. Along with 6,000 plants, yielding generally 1,000 lbs. of tobacco, one person may manage four acres of Indian corn. There are four kinds of tobacco reared in Virginia, namely, the *sweet-scented*, which is the best; the *big* and *little*, which follow next; then the *Frederick*; and lastly, the *one* and *all*, the largest of all, and producing most in point of quantity. The Virginian tobacco is reckoned superior to any raised in the southern states; and great care is taken by the regulations of the state, that no frauds be practised upon the merchants, and that no inferior tobacco be palmed upon the purchaser. For this purpose, houses of inspection are established in every district where tobacco is cultivated, whose regulations are rigorously enforced; this contributes, as much as the real superiority of the article itself, to keep up its price in the market. Every person who intends his tobacco for exportation, packs it up in hogsheads, and thus sends it to one of the inspecting houses. Here the tobacco is taken from the cask, which is opened for the purpose; it is examined in every direction, and in every part, in order to ascertain its quality, its homogeneity, and its purity; if any defect is perceived, it is rejected and declared to be unfit for exportation. If no defect appear, it is pronounced to be exportable. It is then repacked in the hogshead, which is branded with a hot iron,

marking the place of inspection, and the quality of the contents; and then lodged in the inspecting storehouses, there to await the disposal of the planter; who receives a certificate of the particulars, serving at the same time as an acknowledgment of the deposit. It is by selling this *tobacco note* to the merchant that the planter sells his tobacco. The purchaser, on viewing this note, is as well acquainted with the article, as if he had inspected it himself; and he has only to send the note and transfer to the store where the tobacco lies, and it is immediately delivered out, agreeably to his orders. This measure has insured a preference in the foreign market to the Virginian tobacco, and prevents the deterioration of the article.

Sugar.] According to father Hennepin, the sugar-cane is indigenous in Louisiana, and was found growing spontaneously near the mouth of the Mississippi, on its first discovery. In 1762, several of the richest planters began the cultivation of the sugar-cane, and erected mills to press the canes. Very little progress, however, was comparatively made in the cultivation of this useful plant, while Louisiana remained in the possession of the Spanish settlers. Since its annexation to the United States, the cultivation of the sugar-cane has been prosecuted here with great success. In 1817, 20,000,000 lbs. or more than one-fourth of the annual consumption of the United States, were made in this state. The culture of the cane has also been introduced into Georgia, and there seems little doubt of its succeeding equally well there as in Louisiana. The culture of the cane is found not to be more laborious than that of cotton, and is not liable to so many accidents; 1000 lbs. per acre is not considered a great crop. This at 10 cents, ($5\frac{1}{2}$*d.*) would be 100 dollars. Almost every planter along the sea-coast of Georgia is now turning his attention to the culture of the sugar-cane; and from experiments already made, the cane is found to grow luxuriantly, as far north as the city of Charleston, in South Carolina.

Maple Sugar.] Of all the trees of North America, the sugar-maple, or *acer saccharinum* of Linnæus, is the most extolled by American writers on account of its utility. This tree is to be found from the banks of the Tennessee on the south, to Canada on the north,—and from the Missouri on the west, to the Alleghanies on the east; and wherever found, always indicates a good soil. It grows in the greatest abundance in the western states. It is as tall as the oak; from two to three feet in diameter; and puts forth a white blossom in the spring before any appearance of leaves. Maples sometimes appear in groves covering five or six acres; but are more commonly interspersed with other forest trees. From 30 to 50 trees are generally found upon an acre of ground. The colour of the blossom distinguishes it from the *acer rubrum*, or red maple, whose blossom is red. Its wood is inflammable, and its small branches are so impregnated with saccharine matter, as to afford nourishment to the cattle, horses, and sheep, of the first settlers, during winter, before they are able to provide forage for that purpose; its ashes also—as elsewhere noticed—afford a great quantity of excellent potash. It attains its full growth in 20 years; and thrives best in a northern exposure. Its sap is more abundant as the winter has been more severe; consequently the sap of the maple is more abundant in the New England states, than in those which lie to the south. So far is it from being injured by tapping, that on the contrary the oftener this operation is performed, the more syrup is obtained; and in this respect it follows the law of animal secretion. A single tree has not only survived, but even flourished, after 42 annual tappings. A tree of an ordinary size is said to yield 5 or 6 lbs. of sugar annually, from

20 or 30 gallons of sap. In the state of New York, from a single tree which had been tapped for several years successively, 20 lbs. 1 oz. of sugar was obtained in one season. Besides sugar, the sap yields excellent molasses and vinegar. From the many millions of sugar-maples in the United States, one would be apt to think that it would be a very easy thing for the Americans to raise as much sugar as would be necessary for home consumption; especially as we are told by their writers, that the process is so simple and cheap, and might easily be managed merely by women and children. Nay, even for exportation a sufficiency might be produced, so as amply to repay the expense and labour. The total quantity at present manufactured in the states is about 12,000,000 of pounds.

The Myrtle Wax-tree.] The myrtle wax-tree, (*myrica cerifera,*) i one of the most remarkable in Louisiana. The bees conceal their honey in it, to save it from the bears. In the colour of its bark, and its height, it resembles the common laurel, rising in several stems from the root; but its leaves are neither so thick nor so lively as those of the laurel. It bears its fruit in bunches like a nosegay, rising from the same place in various stalks of two inches long. At the end of each of these is a small pea containing a kernel in a nut, which last is wholly covered with wax. The fruit, which is plentiful, is easily gathered, the branches being very flexible. Two kinds of wax are produced by this tree,—one a whitish yellow, and the other green. They throw boiling water upon the stalks and grains till they are entirely floated; and when they have thus stood a few minutes, the water is poured off, which carries the finest wax along with it, which when cold is pale yellow, and may be bleached in six or seven days. Having separated the best wax, boiling water is again poured upon the stalks and grains, till the whole wax is judged to be separated. The wax thus produced is so dry and brittle, that if it falls, it breaks into several pieces.

Zoology.] The wild animals of the United States nearly correspond with those of Canada. The class *mammalia,* in North America, as far as it is known, includes 118 quadrupeds and 28 cetacea. In the countries between the Missouri and the Atlantic, their numbers are constantly decreasing, in proportion as the population is increasing. The moose-deer is becoming very rare, and will probably be soon extirpated, as the wolf and wild boar have been in Britain. Among the animals now lost, is classed the mammoth, or *mastodon giganteum,* whose enormous bones are particularly found near the salt-licks upon the Ohio. It has not been found in South America. The buffaloes, which used to herd in such vast numbers in the western territory, have almost all crossed the Mississippi and Missouri, and taken refuge in the vast plains of Louisiana. Numerous as they seemed to be on the west of the Alleghanies, they are still far more so in the extensive country above mentioned. Pike affirms, that on the banks of the Arkansaw, there were, at one time, at least 3000 of these animals in his view; and at another time says that he would not attempt to describe the droves of buffaloes which he saw in his route, but that the whole prairie on both sides of the river was covered with them, and that their numbers exceeded imagination. Lower down the river, Wilkinson says that the herds of elk, deer, goats, and buffaloes, surpassed credibility; and solemnly asserts, that he saw more than 9000 buffaloes during one day's march. The buffaloes, at 4 years' old, weigh from 1200 to 1400 lbs. weight: their flesh is said to be preferable to beef: and they are frequently killed for the tongue alone, which is said to be a delicious morsel.

Among the animals common to North America, are six kinds of squirrels, which greatly injure the maize-plantations and the fields of wheat. The species called the Carolinian squirrel, is grayish, and a little larger than the European one. Their number is so considerable in Kentucky, that, several times a day, the children are sent round the fields to scare them. At the approach of winter, they appear in Kentucky in such numbers, that the farmers are obliged to unite to hunt them. This chase is frequently converted into a party of pleasure; the hunters divide into pairs, and may then kill 30 or 40 in a morning, while an individual, on the contrary, will scarcely kill one; for the squirrel, laying himself along the trunk of the tree which he has ascended, turns continually so as to keep it between him and the hunter. Vast numbers of antelopes frequent the plains of the Missouri. This animal is described by captain Lewis as the fleetest of all quadrupeds, seeming rather to fly than to run. Timorous and shy, it generally rests on the ridges which command a view of all the approaches of an enemy: the acuteness of its sight distinguishes the most distant danger; the delicate sensibility of its smell defeats the precautions of concealment; and when alarmed, it flies with a speed equal to the fleetest race-horse. Beyond the Mandan villages, and from thence to the Rocky mountains, are vast numbers of those animals, which, by the French and natives, are called wild or mountain-sheep; but they very little resemble sheep, except in the head, horns, and feet. They are of a dun colour, except on the belly and round the rump, where they are white. In size, they are somewhat larger than a deer; they have fine soft hair, and very large horns, especially the males. The European animals which have been naturalized in America are the cow, horse, ass, hog, sheep, goat, and dog; and these have multiplied to such a degree, as to exceed the native quadrupeds greatly in number. The finest horses in the United States are those of Pennsylvania, Virginia, and Kentucky, which, by their mien and the elegance of their form, may be compared with the best in Europe. Their beauty arises from crossing the English and Spanish breeds. As the Virginians are passionately addicted, like their English ancestors, to horse-racing, more attention is there paid to the improvement of the breed than in any other quarter of the United States, and consequently Virginia is reputed to have the best horses for the saddle or the carriage. Vast numbers of wild horses are to be found in Louisiana and Mexico. They are all originally from the Spanish settlements, and have multiplied amazingly in the extensive savannahs and prairies. Many of them have been stolen by the Sioux or Nawdoesses Indians, who roam between the Missouri and Mississippi; and great attention is paid to rearing these animals by the Sioux. They feed in large herds on the prairies of the Arkansaw. As many horses are to be found in these immense plains, and those of New Mexico, as would supply all the savages of North America, the Spaniards, and the people of the United States. Vast droves of them are imported into the latter, from New Mexico, though the trade be contraband; the Spaniards of the province of Texas being far superior to the Americans in the art of taking and breaking them. These horses are sold at New Orleans and the Natches, for 50 dollars. They have an exceeding hard trot, are very restive, bear on the bridle, and very often free themselves from it, and take to flight. Michaux remarks that little attention is paid to the rearing of sheep in the states west of the Alleghanies; for though he travelled 200 miles through Kentucky, he saw but four plantations at which there were any Their flesh is not

much esteemed, and the wool is of the same coarse quality as that of the eastern states. It is in the New England states, and in the western parts of Pennsylvania, that the greatest quantity of sheep is reared. Merino, or Spanish sheep, have been lately introduced into the United States.

Of all the domestic animals, pigs are the most numerous, in the western states. Every inhabitant keeps some, and several have as many as 150 or 200. These animals never quit the forests, where they always find food, particularly in autumn and summer. They grow extremely wild, and herd together. Sometimes they penetrate into the recesses of the forests, and do not re-appear for several months; they are, however, accustomed to return to the plantations occasionally, by feeding them with maize once or twice a week. The number of horned cattle is very considerable, especially in the New England states, where great attention is paid to the breed of milk cows. But the number is daily augmenting in Kentucky and the state of Ohio; chiefly, however, for the purposes of fattening and exportation to the eastern states.

Of amphibious animals, many different species are to be found in the lakes and rivers of the United States; the Missouri in the lower parts of its course swarms with alligators; as also a number of its tributary streams, and all the rivers of the southern states. Of serpents, Dr Morse enumerates near 40 kinds in the United States. Virginia, in particular, produces great numbers. The rattle-snake is the largest, and most dreadful.

Among the fish, are most of those esteemed in Europe; and among those that are peculiar may be mentioned the large species of white trout found in the lakes, and the cat-fish in the Ohio, Mississippi, and Missouri, some of which weigh above 100 lbs. The quantity of fish in the Missouri and its tributary streams is astonishing. In the Maha creek, whither captain Clarke and ten of the party went to fish, 387 of different kinds were caught in a few hours; and at another time, 709 fish were caught in the same stream, 167 of which were large pike.

Charles Lucien Bonaparte has arranged the birds of the United States into 28 families, 81 genera, and 362 species, viz: 209 land and 153 water-birds. Of these 81 genera, 63 are common to Europe and America, while 18 have no representatives in Europe. Vast numbers of wild turkies are to be met with in the United States, but especially in the western territory and Louisiana. A chain of hills stretching through Pennsylvania to the Delaware is denominated the Flying ridge, from the innumerable flights of turkies on them. These birds were peculiar to America, especially in the northern division of that continent; and were originally imported from Mexico to Spain, and from thence to England; so that all the various breeds of domesticated European turkies are derived from the wild American breed, which is larger, and the colour of whose plumage and legs is a deep red. They feed chiefly on chesnuts and acorns in autumn and in winter.

Mineralogy.] Notwithstanding that rich mines of gold and silver are common in the adjacent old Spanish territories, none of that character have yet been discovered in any part of the United States. Considerable quantities of gold have, however, been found in the county of Cabarrus, in North Carolina, insomuch, that of the gold coinage in 1804, about 11,000 dollars in value were the produce of virgin-metal from that county. The cupidity of the proprietors of the soil in the gold-mining districts, has yet prevented the erection of proper machinery for raising and pulverising the gold ore. It is also said, that the finest particles which occur in alluvial

matter are neglected, and only the large grains and lumps sought after. Some American and French hunters pretended to have discovered, up the Washita, 30 leagues above the hot springs, silver ore of so rich a quality that three pounds of ore yield a pound of silver. Indications of silver are also said to occur on the Little Missouri, (a small stream that runs into the Washita, and a different river from the Little Missouri of Lewis and Clarke,) which flows over a bed of martial pyrites. Copper is said to be found in the state of Massachusetts. Within a few miles of New York, is a pretty rich copper-mine, yielding from 60 to 70 lbs. of fine copper, per cwt. Rich copper-mines are found in New Jersey, on the rivers Passaik and Rariton. Other mines of the same mineral are found in Virginia, and near Lake Superior; but none of these, that in the vicinity of New York excepted, are now wrought. According to Imlay, there is a very rich vein of native copper on the river Wabash; which he affirms, in his usual hyperbolical manner, to be perhaps the richest in the bowels of the whole earth. Zinc has been discovered in Pennsylvania. Lead is said to appear on the banks of the Connecticut, 2 miles from Middleton. It is also reported to appear in the state of New York; and in the Shawagunk mountains, in New Hampshire, there is a considerable vein of lead ore, accompanied with manganese. This mineral is also found in several parts of Virginia, Kentucky, and Tennessee. A very rich and extensive vein of lead is said to stretch along the eastern bank of the Missouri, from the mouth of Rocky river, more than 100 miles upwards. But the most valuable lead-mines are found in the lately acquired territory of Upper Louisiana. These mines are nigh the banks of the Marrammeg, which falls into the Missouri between the settlements of St Louis and St Genevieve; and have hitherto been wrought with considerable profit. They cover an area of more than 3000 square miles, and are said to be the most extensive on the globe. The ore is of the richest and purest kind, and exists in quantities sufficient to supply the whole United States. The number of mines is 165, in which more than 1,100 men are employed, producing annually 3,000,000 pounds of the metal, valued at 120,000 dollars.

There is abundance of iron ore, of various qualities, in the United States. In the state of Maine, the founderies are supplied with bog-ore; and another kind, in great abundance, is found in Massachusetts. There are iron mines in Rhode island, the middle states, and in South Carolina. Pennsylvania abounds in this mineral. "Immense quantities of iron ore," says Dr Morse, "are found in various parts of Massachusetts, particularly in the old colony of Plymouth, in the towns of Middleborough, Bridgewater, Taunton, Attleborough, Stoughton, and other neighbouring towns, which have consequently become the seat of iron manufactures." There are also many iron works in Maryland; and iron ore is found in Tennessee and Kentucky. It is however stated, in Gallatin's report to the house of representatives for 1810, that although a great proportion of the iron ore found in Vermont, Pennsylvania, Maryland, and Virginia, be of a superior quality, and some of the iron manufactured there, equal to any imported, it is matter of regret, that, from the great demand, and from want of proper attention to the manufacture, much inferior American iron is brought to market. Iron ore, in abundance, is met with on the banks of the Washita, but it is of an inferior quality. The number of furnaces, forges, and bloomeries, in 1810, was 530, and the value of the iron manu-

factured annually was estimated at from 12,000,000 to 15,000,000 of dollars.

Coal has been found in large quantities in various parts of the United States, particularly on James' river in Virginia. At two or three places, where shafts have been sunk on its left bank, after digging 20 fathoms through a red clay, a bed of coal, 24 feet thick, has been found reposing on an inclined bed of granite. The coals of this mine, and indeed of all those which have been opened in Virginia, are very small: and the most solid pieces which can be obtained, crumble into dust at the slightest touch; so that they are much more adapted to be used in a smith's forge, than to be consumed in grates. The upper branch of the Patomac, above and to the left of Fort Cumberland, has been celebrated for its strata of coal, forming down on its banks, so that boats can lie at the river side, and load themselves immediately from it. In 1804, a horizontal bed of coal, 10 feet thick, was found on the banks of the Juniata, 25 miles west of Huntingdon, Pennsylvania. The price at the mine is seven or eight cents the bushel; and there is an easy water carriage to Columbia, in the same state. The whole space between the foot of the Laurel mountains and the rivers Alleghany and Monongahela, besides the lower part of the courses of these rivers, and of the rivers Youghiogheny and Kishkeminitas, is one continued stratum of coal, resting on a horizontal bed of calcareous stones, covered with slate and schist. This stratum rises and falls with the strata in the hills and vallies; and it is thicker in the former, thinner in the latter, being in general from six to seven feet thick. This stratum is at the mean depth of 12 and 16 feet below the surface. But the country being as yet almost one continual forest, and very thinly inhabited, considering its immense extent, these mines of coal have not been opened unless very partially in the immediate vicinity of Pittsburg. Almost all the large streams that fall into the Ohio have coal deposits, more or less, in the lower parts of their courses. In Upper Tennessee, abundance of stone-coal is found in the Cumberland mountains. Vast beds of coal exist in the upper course of the Mississippi; and it is well known, that in the lower part of its course, the vegetable substances brought down by the stream, and deposited on the banks, are advancing toward a state of perfect coal; as it is now admitted by all philosophers, that coal is often formed by heaps of trees, first carried away by rivers and floods, and afterwards covered with earth. On the banks of the Missouri are vast quantities of coal. Fifteen miles up this river, and six miles below the village of St Charles, is a remarkable large coal hill, termed by the French, *La Charbonnierre*. It is one solid mass of stone coal, which (says Pike) would probably afford sufficient fuel for all the population of Louisiana. Nigh the confluence of the Kanzas with the Missouri, is a high bank of solid coal, on the north side of the latter stream. Near the Mandan villages, stone coal appears in the bluffs, or steep banks, on the south bank of the river; and beyond the Mandans, for the space of more than 400 miles, appearances of coal are almost constantly indicated by the strata on both banks. In the eastern states, however, coal is by no means abundant. Wood for fuel, though plenty, is dear, from the high price of labour, so that many of the inhabitants burn pit-coal imported from Great Britain.

Limestone is rare to the E. of the Blue ridge. From Milton, near the foot of the South mountain, a vein of limestone, formed like schist, and placed between layers of perfect slate, never more than ten feet thick, but

frequently less, stretches 220 miles in a N.E. and S.W. direction. This limestone, when calcined, makes excellent lime. Abundance of marbles are found in the western states; and the beautiful red serpentine, of which the pipes of the Indian chiefs are made, comes from the west of the Mississippi. There is a small creek, which enters the Sioux river, a little below its falls, after passing through cliffs of red serpentine, which is called Pipe-Stone creek. The necessity of procuring this article has produced a sort of law of nations, by which the banks of this creek are held sacred by all the Indian tribes; and these quarries possess a right of asylum, or protection from the ravages of war, or the attacks of hostile tribes. A creek that falls into the river St Peter's, not far from its entrance into the Mississippi, on the W. side, is held equally sacred, passing between cliffs of the same material. Plumbago or black lead, aluminous slate, and asbestos, are found in Massachusetts. Zinc is found in Connecticut and New York. Fine basalt, talc, white and yellow quartz, gray and green lapis ollaris, and petro-silex, occur in various parts of the United States. The Indian hatchets were formerly made of fine basalt; their knives of quartz and petro-silex; their kettles of lapis ollaris, as also their tobacco-pipes; but the calumets, or pipes of peace, were made of the fine serpentine above mentioned. On the south side of the Missouri, and considerably beyond its confluence with the Platte river, are two successive ranges of steep cliffs, containing alum, copperas, cobalt, and pyrites or fire stone. The water of the river was so impregnated with these mineral substances, especially the cobalt, that the whole American party were sickened for several days, by inadvertently drinking of it. Of precious stones, properly so called, there are few or none in the United States, with the exception perhaps of topazes which are said to have been found in Connecticut. The state of Georgia contains no minerals whatever, except a bank of oyster-shells, 90 miles from the sea. Gypsum, or plaster of Paris, is found in the state of New York; and it is supposed that immense beds of it exist on the high grounds to the west of the Washita. It is also found in several places in the vicinity of the Missouri. White pipe stone clay, marle, red, and yellow ochre, and fuller's earth, are found in the northern states.

That useful mineral, salt, is found in various parts of the United States, but not yet in such quantities as fully to supply the home-consumption. The eastern states are chiefly supplied with this necessary article from the salt springs of Onondago and Cayuga. The salt works of *Onondago* are in the state of New York, about 5 or 6 miles N. of Onondago village, in the village of Salina, which is situated on a bank 50 feet above the creek and marsh in front. The country in the immediate vicinity appears to be a stiff barren clay; and wood, from the vast consumption of the furnaces, has already become scarce. The salt springs are found on the margin of an extensive marsh, not unlike in appearance to the salt marshes of Hoboken. Salt springs are much more abundant in the western states than in those to the east of the Alleghanies. There are about 12 in the single state of Kentucky, between the Great Sandy and Cumberland rivers. These springs are called *licks*, from the earth about them being furrowed out in a curious manner by the buffalo and deer, which lick the earth on account of the saline particles with which it is impregnated. According to all accounts, the water of these licks, or salt-springs, is not so strong as sea-water; as it requires (says Imlay) 400 gallons to make one bushel of salt, which is more by one-half than would be wanted of sea-water to produce that quantity. The springs at the Great Kanhaway are far superior

to any other in the western country, both with respect to the strength of the water, and the quantity and quality of the salt, as it requires only from 90 to 130 gallons of salt water, to produce a bushel of that useful mineral. There is abundance of salt springs on the Wabash; and there are more salines to the west of the Missouri than would be sufficient to supply the wants of a population double that of the United States. Four miles below St Genevieve, is a copious salt spring, where all the salt used in the Illinois and Indiana territories is made. On the banks of the Washita, under the parallel of 34°, N. are two remarkably strong salines, where the water oozes from a bed of quicksand, as saline and bitter as the water of the ocean. Ten quarts of this water, when evaporated, yielded a saline mass, which, when dry, weighed eight ounces. This brine is therefore double the strength of the best licks in Kentucky. The country on the south of the Arkansaw abounds in salines to such a degree as to induce an almost complete sterility of soil for some hundred miles in the upper part of its course. The very prairie-grass is incrusted with salt, which the Osage Indians obtain by scraping it off with a turkey's wing into a wooden trencher.[1] The space between the Arkansaw and the upper waters of the Kanzas is also full of saline matter; and beyond the confluence of the Great Osage with the Missouri, a great number of streams strongly impregnated with salt, occur, which fall into the latter. Saltpetre is also very abundant in this quarter, being found in numberless caves along the Missouri; and the shores of the Arkansaw are as it were frosted with nitre. It is also found in Virginia, Kentucky, and the other western districts; but not in such quantity as to supply the demand, as the most of the saltpetre is imported from the East Indies. The *Kanawha Register* furnishes a statement of the quantity of salt manufactured in the United States during the year 1827; the result of which is as follows:—Whole quantity manufactured, 4,151,182 bushels; of which New York furnishes 1,134,452,—Virginia, 929,848,—Massachusetts, 485,861,—Pennsylvania, 350,000,—Kentucky, 195,000 bushels.

CHAP. IV.—POPULATION.

Original Population, and Existing Indian Tribes.] HAVING, in the introduction to this volume, noticed the perplexing question relative to the native population of the American continent, namely, by whom, at what time, and from whence, this quarter of the globe was peopled,—and having also, in our description of British America, given a general notice of the native tribes, with their manners, customs, and other peculiarities,—this section shall be confined to a short account of those tribes which inhabited the eastern part of the United States' territory, at the epoch of its first

[1] There is a flat in this country, of about fifteen leagues in diameter, surrounded by hills; the soil is a black very fine sand, and so hard that the horses' feet hardly leave a trace. During a warm and dry season, vapours are exhaled from this flat, which, after being condensed, fall on this black sand, covering it with a very white and fine saline incrustation, half an inch thick; the rains destroy this phenomenon. Eighteen miles distant from this flat is a mine of rock salt; and 15 leagues south of the above flat is another mine of rock salt. These two mines differ only in colour: the first bordering on blue, and the second approaches to red. The Indians, who are well acquainted with these mines, use levers to break and raise the rock salt. Still farther to the south, and on one of the branches of the Arkansaw, is another remarkable saline. On the declivity of a small hill, there are five holes, about a foot and a half in diameter, and two in depth, which are always full of salt water, without ever overflowing.

discovery and settlement by the English colonists; and of the names, number, and population, of such aboriginal tribes as have survived the general destruction of the race; and of those who still roam in the plains of the Wabash and Illinois, or in those of Louisiana. The following account of the tribes which existed alongst the Atlantic coast when first explored by English adventurers, is taken from a recent American publication.

The district of Maine was possessed by the *Tarrenteens*, who were denominated *Abinaquis* by the French. These were always hostile to the English, having French priests early settled among them.—The *Aberginians* resided round Massachusett's bay. These were often attacked by the Tarrenteens, and as often fled to the English for protection.—The *Mohegins* dwelt between the Thames and Connecticut rivers, and on the higher branches of the former. These were generally friendly to the first settlers.—The *Pequots*, settled on the sound between New London and Stonnington, were nearly exterminated in the war of 1637. The *Narragansets*, who dwelt principally round the bay of the same name, were a powerful and populous tribe, and could furnish 2000 warriors in 1675. They were the most ingenious savages in the eastern country, and made the neatest wampum, pendants, and bracelets, stone-pipes, and earthenware, which they disposed of to their Indian neighbours for furs and peltry, bartering the latter to the settlers, for shrouds, paint, rum, and baubles.—Next to the Narragansets, were the *Womponoags*, whose sachem, Massasoit, gave his name to Massachusett's bay, and had his principal seats at the towns now called Bristol and Middleborough. It was Philip, the son of this sachem, who urged his tribe to a destructive and obstinate war with the English settlers, in 1675, and who fell in the contest.—Besides these, were many other tribes of less notoriety, in what is now called the New England states: all of whom have nearly perished.—To the south of the *Pequots*, there was another powerful tribe, once sovereigns of an extensive region, reaching from the Connecticut to the Chesapeak, comprehending all that part of New York which lies between the sea and the highlands, New Jersey, Pennsylvania, and Delaware states. The natives of this tribe called themselves *Linnellinopes*; by the French they were called *Les Loups*, or 'the Wolves,' and by the English, *Delawares*. This confederacy comprised numerous subordinate clans, the principal of which were the *Chihocki*, who dwelt on the W. side of the Delaware; the *Wanami*, who ranged from the Raritan, in New Jersey to the sea-coast; the *Munseys*, on the upper streams of the Delaware, down to the Le High; the *Wabingas*, or River Indians, between the Delaware and the Hudson; and the *Mohiccons*, or *Manhattans*, who occupied Staten island, York island, and part of Long island, from the hills to the sea. These confederated tribes, under the native appellation of Linnellinopes, waged war for the greatest part of a century with the Iroquois, or Five Nations; but were at last subdued, and reduced to the most humiliating situation, in 1682, when Penn landed in Pennsylvania.—The territory of Maryland was inhabited by the *Susquehannoes*, who were completely exterminated by the Iroquois, Nanticocks, Conoys, Tuteloes, and Monakans, most of whom united with the Iroquois in the subjugation of the Delawares.

When Virginia was first settled by the English, in 1607, this country, from the sea to the mountains, and from the Patomac to the southern waters of James' river, was inhabited by 40 different tribes of Indians. Of these, the *Powhattans*, the *Mannohoais*, and the *Monacans*, were the

most powerful. The Powhattan confederacy claimed an extent of 8000 square miles, and contained a population of 8000 souls. These numerous tribes are now extinct—To the south of James' river, and in North Carolina, the most noted Indian tribes were the *Chowannois*, with their allies; the *Nottaways* and *Meherrins*, on the east; and the *Correes*, *Tuscaroras*, and *Cherokees*, on the west. The Tuscaroras were a numerous and powerful tribe; but having engaged in a war with the whites, in 1710, they were nearly exterminated, a remnant of the tribe being obliged to remove to the north, where they afterwards united with the Iroquois, and became the sixth confederated tribe.—The most noted tribes among the aborigines of South Carolina, were the *Stonoes*, *Westoes*, *Sarannees*, *Apalatchics*, *Congaroes*, *Esaws*, and *Yamasees*, on the east and in the centre, all of whom are now either extinct, or mingled with other tribes; and the *Catabaws* and *Cherokees*, on the west, who still retain their names, and a portion of their ancient territories on the frontier of the state. The Cherokees were ascertained to amount to 15,060 in 1825.

Of all the Indian tribes now extinct, the *Natches*, who formerly dwelt on the east of the Missouri, were the most remarkable, having advanced higher in the scale of civilization than any of their aboriginal neighbours. They had 500 chiefs, called *Suns*, who all obeyed the *Grand Sun*, their common sovereign. The sun was the chief object of their adoration; and their principal festival was in July, at the time of harvest; a perpetual fire was maintained by their priests, as among the Peruvians and ancient Persians. These Indians lived for some years in great friendship with the French colonists of Louisiania, whom they permitted to settle on their lands, and to whom they rendered every service in their power. Their hospitality, however, was repaid in such a manner, that they determined to rid themselves of their new guests; and consequently, on the eve of St Andrew, 1728, they surprised the fort, and put the whole garrison to death. At the same time, the inhabitants to the number of 500 were massacred; some few women and children only excepted, who were made prisoners, and a very few of either sex who escaped. The whole colony armed to avenge the cause of their slaughtered countrymen upon these Indians, but with various and uncertain success. In 1730, a re-inforcement having arrived from France, the Natches, with their wives and children, crossed the Mississippi, and fled up the Red river to the vicinity of Natchitoches; where they erected a fortification, by the side of a small lake of limpid water for their defence. The French followed them, 1500 strong, and being joined by the Indians of Natchitoches, the Natches were attacked in their entrenchments, early in the morning, and after a desperate defence of six hours, all who were not killed in battle, were driven into the lake, where the last of them perished, and the Natches as a nation became extinct.

Indian Tribes within the States.] "By far the most numerous and the most important of the native tribes which still continue in the immediate vicinity of the whites, are," says Cooper, "those which occupy reservations in Georgia, the Floridas, Alabama, Mississippi, and Tenessee. The lingering fragments of a hundred tribes are certainly seen scattered over the immense surface of this country, living on greater or less tracts that had been secured to them, or dwelling by sufferance in the woods; but the only people now residing E. of the Mississippi who can aspire to the names of nations, are the *Creeks*, the *Choctaws*, the *Chickasaws*, the *Cherokees*, and the *Seminoles*, all of whom dwell in the portion of country

I have named. As a rule, the red man disappears before the superior moral and physical influence of the white, just as I believe the black man will eventually do the same thing, unless he shall seek shelter in some other region. In nine cases in ten, the tribes have gradually removed W.; and there is now a confused assemblage of nations and languages collected in the immense hunting-grounds of the prairies. It is impossible to say any thing of the numbers of the Indians, except by conjecture, since they are not considered as coming properly within the computations of the census. Perhaps the five nations named may contain not far from 20,000 souls. It is not probable that all the Indians that live within the boundaries of the United States, stretching from the Atlantic to the Pacific, materially exceed 120,000, if indeed they reach that amount.[2] Still I do not pretend to any great accuracy in my estimates. Their numbers, in this quarter of America, have always been exaggerated; and the sounding terms of nations and tribes have contributed to the extension of a mistaken idea of their importance.

"The ordinary manner of the disappearance of the Indian is by a removal deeper into the forest. Still, many linger near the graves of their fathers, to which their superstitions, no less than a fine natural feeling, lend a deep interest. The fate of the latter is inevitable; they become victims to the abuses of civilization, without ever attaining to any of its moral elevation. As might be supposed, numberless divisions of these people, when the country was discovered, were found in possession of districts along the coast, and deriving a principal means of support from the ocean. They were fishermen rather than hunters, though the savage state ordinarily infers a resort to both pursuits. Most of these people, too, retired reluctantly from a view of the Great salt lake, but some were environed by the whites before they were probably aware of the blighting influence of the communion, and getting gradually accustomed to their presence, they preferred remaining near the places where they had first drawn breath. Trifling districts of territory have been, in every instance in which they were sufficiently numerous to make such a provision desirable, secured to them, and on these little tracts of land many of them still remain."

Many of these Atlantic Indians, the same writer adds, go to sea. They are quite often found in the whalers, and, in some instances, in the vessels of war. An officer in the navy has told me that he once knew a Montauk Indian who was a captain of the maintop in a sloop of war; and in another instance a flag-officer had his gig manned by Indians. They make active and very obedient seamen, but are never remarkable for strength. The whole number of them who now go to sea, does not, however, probably exceed a hundred or two. The manufacture of baskets and brooms is a

[2] This calculation of Mr Cooper is—if former accounts are at all to be credited—by far too small. The number of Indians resident within the United States' boundary E. of the Mississippi, has been stated, by other authorities, at 123,712, and W. of it, 67,065, total 190,777; to which adding other tribes near the Rocky mountains, the whole number will be about 200,000 in the whole of the United States, or 80,000 more than Cooper's statement, which even extends to the mouth of the Columbia. In Malte Brun's statement, furnished by his translator, and taken from Nile's American register for June, 1822, the whole number of Indians E. of the Mississippi is given at 120,346, whilst to the W. of the Mississippi to the Rocky mountains and S. to the Red river their number is stated at 134,220; total 254,566, within the United States' boundary. To the W. of the Rocky mountains, the number is stated at 171,200, and between Red river and Rio del Norte, at 45,370, total 216,570. Grand total 470,000.—But it must be remarked, that this latter estimate of 216,570, is without the United States' boundary. The calculation in Malte Brun is therefore about 55,000 more than the result of that to which we are inclined to adhere, and three times more than Cooper's statement, which includes the territory of the Columbia.

common employment of all the Indians who reside near the settlements. They feed on game, and, sometimes, like the gypsies, they make free with poultry, though in common they are rigidly honest; nearly always so, unless corrupted by much intercourse with the whites. With the proceeds of their labour they purchase blankets, powder, and such other indulgences as it exceeds their art to manufacture.

"The reservations in the old states, and with tribes that cannot aspire to the dignity of nations, are managed on a sufficiently humane principle." The reader will observe these are Mr Cooper's words, not ours. "The laws of the state, or of the United States, have jurisdiction there, in all matters between white men, or between a white man and an Indian; but the Indians themselves are commonly permitted to control the whole of their own internal policy. Bargains, exceeding certain amounts, are not valid between them and the whites, who cannot, for instance, purchase their lands. Schools are usually provided in the more important tribes, by the general government, and in the less by charity. Religious instruction is also furnished by the latter means. I saw reservations in which no mean advances had been made in civilization. Farms were imperfectly tilled, and cattle were seen grazing in the fields. Still civilization advances slowly among a people who consider labour a degradation, in addition to the bodily dislike that all men have to its occupations.

"There are many of these tribes, however, who fill a far more important, and altogether a remarkable position. There is certainly no portion of country within the admitted boundaries of the United States, in which their laws are not paramount, if they choose to exert them. Still, savage communities do exist within these limits, with whom they make treaties, against whom they wage open war, with whom they make solemn peace. As a treaty is, by the constitution, the paramount law of the land, the several states are obliged to respect their legal provisions. The government, it would appear by the reports, puts the utmost latitude on the construction of their constitutional powers, by even paying money for the support of missionaries among the Indians. I believe, however, that the alleged and legal object of this charge, is for general instruction, though, in point of fact, the teachers are missionaries. They are of all sects, Protestant and Catholic, the question of creed never being discussed at all. I see by the reports, that (in 1827) there were 1291 scholars in the different schools that come under the superintendence of the government. It is not probable that all the Indians belonging to the tribes that receive this instruction, much exceed, if indeed they reach, the total number of 30,000. I think it is therefore apparent, that quite as good provision for elementary instruction is made in behalf of the Indians, as is commonly made for the people of any country, except those of the United States themselves. There is no reason to suppose that all the children who present themselves, are not taught, and there is much reason for believing that efforts are constantly making to induce all to come. The number of teachers is 293, which is quite enough to instruct ten times the number. You are not to suppose, however, that all these teachers are men hired expressly for that purpose. They are the missionaries, their wives, and families, and some of them are for the purpose of instructing in the arts of life, as well as in reading and writing. Much of the expense is defrayed by charitable associations. The sum actually paid by the government for the express object of instruction is 7150 dollars, or enough to maintain rather more than 40 teachers at stipends of 150 dollars each. It is probable that some receive

more, and some less. It is said that the schools are generally in a flourishing condition. A great, humane, and, I think, rational project, is now in operation to bring the Indians within the pale of civilization. I furnish you with its outline as it is detailed in a recent report of the head of the Indian office." The following is the outline of this project:

"West of the Mississippi, the Indians still hold large regions that belong to no state or territory. They propose to several tribes (*Choctaws, Chickasaws, Cherokees,* &c.) to sell their present possessions, improvements, houses, fences, stock, &c. and to receive, in return, acre for acre, with the same amount of stock, fences, and every other auxiliary of civilization they now possess. The inducements to make this exchange are as follow: Perpetuity to their establishments, since a pledge is given that no title shall ever be granted that may raise a pretext for another removal—an organization of a republican, or, as it is termed, a territorial government for them, such as now exist in Florida, Arkansas, and Michigan—protection by the presence of troops—and a right to send delegates to congress, similar to that now enjoyed by the other territories. If the plan can be effected, there is reason to think that the constant diminution in the numbers of the Indians will be checked, and that a race, about whom there is so much that is poetic and fine in recollection, will be preserved. Indeed, some of the southern tribes have already endured the collision with the white man, and are still slowly on the increase. As one of these tribes at least, (the *Chickasaws,*) is included in this plan, there is just ground to hope that the dangerous point of communication has been passed, and that they may continue to advance in civilization to maturity. The chief of the bureau for Indian affairs gives it as his opinion that they have increased about 10 per cent within 6 years. Their whole number is computed at 4,000 souls. Should such a territory be formed, a nucleus will be created, around which all the savages of the W. who have any yearnings for a more meliorated state of existence, can rally. As there is little reluctance to mingle the white and red blood, (for the physical difference is far less than in the case of the blacks, and the Indians have never been menial slaves,) I think an amalgamation of the two races would in time occur. Those families of America who are thought to have any of the Indian blood, are rather proud of their descent; and it is a matter of boast among many of the most considerable persons of Virginia, that they are descended from the renowned Pocahontas."

By a strange abuse of terms, we speak familiarly of the savage *nations* of North America. We might as well apply the term nation to the various hordes of Tartars who roam in central Asia,—or to the Arabian tribes who wander in the deserts bordering on Syria and Egypt,—or, to come nearer home, we might with far greater propriety apply it to the Highland clans, and speak of the nations of the Campbells and of the Camerons. Not one of all the Indian tribes can justly be dignified with that title; the denomination of *clan, tribe,* or *family,* would have been much more appropriate. The aboriginal population does not exceed one person for every 20 square miles; it is constantly declining, and probably—notwithstanding Cooper's anticipations—in the lapse of two centuries at most, the native race will be extinct. From time to time they are bought out—to roam westward, 'like bees whose hive has been destroyed,'—by bargains which Mr Cooper, as he cannot put them higher than the ordinary arrangements between the weak and strong, coolly calls "a deference to general principles of justice and humanity." Besides this helpless state of things, the

continual feuds between the savages, their inordinate propensity for spirituous liquors, and the ravages of the small-pox, are causes powerfully and constantly operating to diminish their numbers. A great number of tribes have been already extirpated by these means, and others have lost more than half their population. It is impossible that this disease should fail of proving mortal, as the Indians have no physicians, live almost wholly on animal food, and plunge themselves into cold water the moment that this disease is discovered. Agricultural habits never seem to have been generated amongst them, and consequently an immense tract of territorial surface is requisite to support a small tribe. The Tartar and Arab tribes collect and tame animals, treat them kindly, rear them carefully, live on their produce rather than on their flesh, and clothe themselves with their wool rather than with their skins. But the native Americans are totally different in their habits from the pastoral tribes of Asia. Though living in a soil abounding with grass and shrubs, and where animals are abundant, they find it more convenient to chase animals into the woods, than to collect and tame them,—more agreeable to kill them, than to feed them; and thus their whole life is spent in hunting, and eating flesh; and as the game is frequently wasted, they are obliged to remove to other spots where the work of extermination has either not commenced, or been suspended for some time, in order to procure animal food. A stronger confirmation of the above fact, that the labours of the chase are totally inadequate to support a numerous population, cannot be given, than in the reply of a sagacious Indian chief, (who happened to be at Philadelphia, in order to solicit congress and the Quakers to furnish him with the means of enabling him to introduce agricultural habits among his tribe,) to Volney. The Indian having remarked the increase of the whites as inconceivable; and that in the course of little more than a century and a half, they already covered America like swarms of flies and gnats; whilst his countrymen, who had inhabited it from time immemorial, were still as thin as deer. Volney asked him, why the Indians did not increase equally fast. "Ah!" said the Indian, "our case is very different. You whites have found the method of collecting at hand, and in a small space, a certain and abundant supply of food; from a piece of ground 15 or 20 times as big as this room, a man gathers enough to feed him the whole year; if to this he adds another plot sown with grass, he breeds animals that supply him with meat and clothing, and all the rest of his time he may do what he pleases. We, on the contrary, require a vast extent of ground to live upon; for to each deer we kill, and one will serve us but a couple of days, a considerable extent of ground is necessary to find nourishment and attain his full growth. If we eat and kill 200 or 300 in a year it is the same thing as if we ate the wood and grass of all the ground on which they live, and they require a great deal. In such a state of things, it is no wonder the whites have driven us, year after year, from the borders of the sea to the banks of the Mississippi. *They* spread like oil on a blanket; *we* dissolve like snow before the vernal sun. If we do not change our course, it is impossible for the race of red men to subsist." This answer speaks volumes on the subject of Indian population; and solves at once the difficulty of conceiving why savages have not multiplied, like the pastoral tribes, or agricultural nations. The arrival of Europeans in their country has been a great calamity to the natives, and has contributed much to diminish their numbers; it is no secret what the red man soon becomes when once within the corrupting reach of European intercourse. Cooper, who should know them

well, calls the majority in or near the settlements, "a humbled and much-degraded race." In the interior they were "all alike, a stunted, dirty, and degraded race." Some of the Indian tribes, we are told, however, are becoming sensible of the evils of savage life, and of the necessity of adopting agricultural habits, as the only means now left to prevent their total extirpation.[3] The *Cherokees* have made great progress in the cultivation of their lands, and even in literature and the arts of civilized life. The *Creeks*, too, have abundance of tame cattle, swine, and poultry; they cultivate tobacco, rice, maize, potatoes, beans, cabbage, melons; and have plenty of peaches, plumbs, grapes, strawberries, and other fruits. They are represented as honest and fair in their dealings, but more averse than all other Indians to part with their lands, and have a most contemptible opinion of the faith of white men. Although a permanent boundary has several times been agreed upon, between them and the United States, yet this has been frequently violated by the white settlers, and given rise to hostilities, which have been attended, as usual, with disastrous consequences to these unhappy and injured natives. Their civil policy is said to be superior to that of the other Indians; and they never use spirituous liquors, that pernicious bane to the great body of the savages. The same commendable custom prevails among the *Ricaras* on the Missouri.

Population of the United States.] If the aboriginal population be rapidly declining, the superinduced European population is proportionally increasing. We are fortunately furnished with the means of ascertaining the degree of this increase, by an act of the American constitution, which ordained that a general enumeration of the inhabitants should be made in three years after the acceptance of the constitution, and that a census should be taken every ten years; and a law for perpetuating which was passed in congress, on the 9th of March 1790. The whole of this census is, or ought to be performed in nine months. Four different enumerations of the whole population—excepting the Indians, who are never included—have been taken since the acceptance of the American constitution, in 1788, namely: those of 1791, 1801 1811, and 1821, the respective results of which were—

	1791.	1801.	1811.	1821.
Population,	3,925,253	5,305,638	7,240,924	9,638,226.

[3] Many tribes, however, have preferred maintaining their independence in the western forests to submitting to the laws of the states in which they now reside, and arrangements we are informed are still in progress for their removal. On this subject the president's message to congress, in 1830, contained the following observations. "The consequences of a speedy removal will be important to the United States, to individual states, and to the Indians themselves. The pecuniary advantages which it promises to the government, are the least of its recommendations. It puts an end to all possible danger of collision between the authorities of the general and state governments, on account of the Indians. It will place a dense and civilized population in large tracts of country now occupied by a few savage hunters. By opening the whole territory between Tennessee on the N. and Louisiana on the S., to the settlement of the whites, it will incalculably strengthen the south-western frontier, and render the adjacent states strong enough to repel future invasion without remote aid. It will relieve the whole state of Mississippi, and the western part of Alabama, of Indian occupancy, and enable those states to advance rapidly in population, wealth, and power. It will separate the Indians from immediate contact with settlements of whites—free them from the power of the states, enable them to pursue happiness in their own way, and under their own rude institutions,—will retard the progress of decay, which is lessening their numbers, and perhaps cause them gradually, under the protection of the government, and through the influence of good counsels, to cast off their savage habits, and become an interesting, civilized, and christian community."

The following table exhibits the details of the last census:

Population of the United States, according to the Census of 1820.

States and Territories.	Free White Males.	Free White Females.	Free People of Colour.	Slaves.	Other Persons.	Total.
Maine	149,195	148,145	929	.....	66	298,335
New Hampshire	119,210	124,026	786	.....	139	244,161
Vermont	117,310	117.536	918	.....	...	235,764
Massachusetts	252,154	264,265	6740	.....	128	523,287
Rhode Island	38,492	40,921	3554	48	41	83,059
Connecticut	130,807	136,374	7870	97	100	275,248
New York	679,551	653,193	29,279	10,088	701	1,372,812
New Jersey	129,619	127,790	12,460	7557	149	277,575
Pennsylvania	516,618	500,476	30,202	211	1951	1,049.458
Delaware	27,905	27,377	12,958	4,509	...	72,749
Maryland	131,743	128,479	39,730	107,398	...	407,350
Virginia	304,731	298,343	36,889	425,153	250	1,065,366
North Carolina	209,644	209,556	14,612	205,017	...	638,829
South Carolina	120,934	116,506	6826	258,475	...	502,741
Georgia	98,404	91,162	1763	149,656	4	340,989
Alabama	45,839	39,612	571	41,879	...	127,901
Mississippi	23,286	18,890	458	32,814	...	75,448
Louisiana	41,332	32,051	10,476	69,064	484	153,407
Tennessee	173,600	166,325	2739	80,097	52	422 813
Kentucky	223,696	210,948	2759	126,732	182	564 317
Ohio	300,607	275,965	4723	.....	139	581,434
Indiana	76,649	69,109	1230	190	...	147,178
Illinois	29,401	24,387	457	917	49	55,211
Missouri	31,001	24,987	347	10,222	29	66,586
Michigan Territory	5383	3208	174	.....	131	8896
Arkansas Territory	6971	5608	59	1617	18	14,273
District of Columbia	11,171	11,443	4048	6377	...	33,039
	3,995,253	3,866,682	233,557	1, 538,118	4616	9,638,226

The population of the North-West and Missouri Territories are not given separately in the census. The Floridas were not annexed to the United States when the census was taken; they were then supposed to contain 10,000 inhabitants.

The population of the American confederacy increases very nearly at the rate of 3 per cent. per annum, and doubles itself in 24¼ years. It must now exceed 12,000,000; but, according to tables computed by Mr Waterston, it stood thus on the 1st of January, 1828:

Whites, and free people of colour, . .	9,514,000
Slaves, ...	1,838,155
	11,352,155

From the above table it appears that out of 26 states and districts, composing the American confederation, only 5 states—namely, those of Maine, Vermont, New Hampshire, Massachusetts, and Ohio—have no slaves. In the southern and western states the number of slaves is greatly increasing, particularly in the state of Tennessee, where the number has been more than tripled in the last 20 years; in that of Kentucky it has been doubled; and in the state of Georgia, the slaves increase proportionally to the white population. In the state of Mississippi, the number of slaves has risen from 3,489 in1801, 17,088 in 1811, to 32,814 in 1820. From the tables of males and females born in the United States, several important inferences may be deduced. In the state of Ohio, where the population was 230,760

in 1811, the difference between the males and females under 10 years of age, was 2,431, being upwards of one in 19; and in the whole United States the difference was 53,852 between the males and females of the above ages—being nearly in the same proportion. From 10 to 16 years of age a drain of the male population takes place, and the equilibrium begins to be restored. From 16 to 26 the effect of the drain is very sensibly felt. Above 26, the males outnumber the females over all the states. In the United States the proportion is nearly one in 17; and in the state of Ohio it is more remarkable, being nearly one in 5. This great disproportion of males to females, in the state of Ohio, is actually counterbalanced by the states of New Hampshire, Rhode Island, Massachusetts, and Connecticut, where the females above 26, and under 45, outnumber the males above the age of 21, one in 11. In New Hampshire it is one in 17. This result corroborates the well-known fact, that the great influx of population into the state of Ohio, has been from these states; and this, taken in connection with other circumstances, shows that the New England states are in fact the great nursery whence the northern part of the western territory is to be peopled; and emigrants from these states, it may be observed, are by far the best of all settlers, as they have generally obtained a virtuous education, and are active, hardy, and industrious.

In the United States, some of the mountainous districts excepted, the average term of human life is shorter than in Europe. Both sexes arrive at maturity at an earlier age in America, but they likewise die sooner. Few reach the age of 63; and one of 70 is as rare in America as one of 80 in France, where the annual mortality is proportionally greater than in England. Travellers remark, that in South Carolina, a man is as old at 50 as in Europe at 65 or 70; and Volney declares, that he heard all the English with whom he was acquainted in the United States say, that their friends who had been settled there a few years in the southern, or even central states, appeared to have grown as old again as they would have done in England or Scotland. This comparative shortness of human life is owing to two causes: the one physical, namely, the climate,—the other moral, namely, the dietetic regimen used by the Americans, and that passionate desire for ardent spirits so prevalent in the United States. Of diseases arising from the climate, consumptions are the most prevalent in the northern and middle states. A much greater proportion of children die in infancy there than in Europe. Consumptions affect the women more than the men, vast numbers of females being cut off in the vernal bloom of youth and beauty. This is attributed to the comparative delicacy of their skin, their more confined and sedentary life, and the lightness of their dress, which in so cold and variable a climate, is insufficient to protect the system from its deleterious effects. Autumnal fevers and agues are the prevalent diseases in the southern states, and materially contribute to shorten human life; and that most awful of all diseases, the yellow fever, is endemial to the climate, and has prevailed more of late years than formerly, extending its ravages as far north nearly as Boston. These fevers and agues are not only prevalent on the southern coasts, but even along the whole course of the Ohio, on both sides; a great part of Kentucky; all the environs of Lake Erie; the Gennessee tract, with its numerous small lakes; and the course of the Mohawk river. Agues might, in many cases, be avoided, if the Americans were as careful to choose proper situations, as they are anxious to procure good lands;

they prefer, however, the damp but prolific soil of the low plains, to the more healthy though less productive soils of the higher grounds.

Slaves and Free Blacks.] The taint of black slavery "is the plague-spot upon the social condition of the Americans;" for, it has been well-observed "be the blight of slavery more or less pernicious to its victim, it reaches the master-caste as well as that of the slave." Humboldt assures us, "that flourishing and industrious villages of free-negroes were existing in Spanish America before its independence; and her subsequent proclamation of equal rights among all her citizens of whatever colour, has, above every other act, secured for her cause the sympathy of Europe. It will be a dark exception to the moral superiority assumed in favour of the United States, if, notwithstanding the encouraging experience of all the gradual movements that have been ever made, and in spite of this last great example, they persist in denying their negro population the chances of improvement due to human beings." Their tendencies are rather against our hopes. Without a pretext, upon the late adoption of a new member into their body, Missouri was converted into a slave state. In the northern and middle states, where the numbers were never very great, a system of gradual emancipation was many years since adopted, which, by giving freedom, at a certain age, to the children born after a given date, has put an end to slavery in these districts. The slaves are chiefly to be found in the southern and south-western states, where the culture is similar to that of our West India islands. It is unlawful to import slaves from abroad into any part of the United States; but it is legal to transport them from one slave state to another; and the northern plantations, which offer very few of the ordinary excuses for the employment of negro labour, and where in many districts the land is so exhausted that the slaves cannot reproduce as much as they consume, are becoming a vast breeding-ground, where blacks are reared for the express purpose of supplying the terrible demands of an internal slave-trade, which is carrying on both by sea and land. No register of punishments is kept; and manumission and instruction are in some places prohibited, in all discouraged. The free blacks are employed in the eastern and middle sections of the Union, as domestic servants or agricultural labourers. There are not many of them educated to mechanical pursuits; they are nowhere on a footing of social equality with the whites; in some states they are not admitted to an entire participation of political privileges; and in some instances—we blush for the charity of Christians to record it—they are excluded from church-fellowship with their white brethren. The slave population, in 1828, amounted to 1,838, 155; and the whole number of people of colour to 2,160,000. Louisiana and South Carolina are the only two states where the slave population exceeds the free, but that very inconsiderably. There appears to be, taking the slave states throughout, two whites to a black. While the increase of the free population between the years 1820 and 1828, was 17 4-10ths per cent, that of the slave population in the same period was 19½. "The Americans," says captain Basil Hall, "are perpetually taunting England with having entailed slavery upon their country." This taunt, if provoked by sweeping criminations, may come as a fair retort from an American of the northern states. But, as regards the validity of the plea, the whole case has completely altered its character, since the acquisition of Florida and Louisiana, countries cultivated wholly by slaves; and still more, by the introduction of Missouri into the Union as a state, where no similar necessity for slave-culti-

vation, on account of climate, was even pretended to exist, but where, nevertheless, slavery has been introduced by the solemn act of the legislature. The ascendancy thereby given to the slave-holding states in the senate, and eventually in congress, affords a melancholy prospect as to the probability of any legislative remedies. Congress has not, in fact, we are reminded by captain Basil Hall, by the terms of the constitution, the slightest shadow of right to meddle with the internal concerns of the states, and least of all with those which relate to slavery. "Any assumption of such pretensions on the part of congress, would be so instantaneously resisted,—by actual force, if necessary,—by the whole mass of the slave-holding states, that the idea could not exist one hour. If such intentions of interference with the slave system should ever be seriously contemplated, either by a powerful executive, or by a majority of the members of congress from the non-slave-holding states, the inevitable consequence would be a division of the Union. It is useless, then, for foreigners to hold the language of reproach or of appeal to America, thereby implying a belief in the existence of such legislative power."

Character, Manners, and Customs of the Americans.] To delineate with accuracy those peculiar features of character in which nations differ from each other, and to trace with acuteness and precision the various sources whence these have originated, is by no means an easy task. Among savage tribes the modifications of mind are comparatively rare, and little diversified by any other circumstances than the greater or lesser facilities of obtaining food, and supporting an existence only one step above mere animal life. In such circumstances there is little room for the developement of genius, or diversity of character, and an extreme uniformity of manners therefore generally prevails; but in proportion as society becomes civilized, the range becomes wider, and the labour of discrimination increases with the gradual developement and diversification of human character. But if to discriminate national character is at all times a difficult task, this task becomes almost insuperahle when treating of the character, manners, and customs, of a population the most heterogeneous that can be conceived, and which heterogeneity is continually increasing by the constant influx of exotic materials. Of this last description is the population of the United States. The parent-stock is indeed originally English; but upon it has been superinduced, at different periods, especially of latter years, such a diversified mass of foreign adventurers, collected almost from every quarter of continental Europe,—Germans, Dutch, Netherlanders, French, Swiss, Poles, Irish, and Scotch,—that the present inhabitants cannot be said to possess those striking and general resemblances to each other which give to a whole people a particular colour, moral character, and physiognomical expression. The people is not yet amalgamated,—it is only in the transition state; and till this is accomplished, till the amalgamation be completed, it cannot be said to have a distinct national character. The only circumstances which can be predicated of the Americans nationally, are a more than sufficient esteem of themselves, an extraordinary propensity to commerce, and a persevering attention to the more practical arts. Unable to boast of ancient renown and past glory, having but lately made their appearance on the political stage, the Americans pride themselves in what they are one day destined to be; and even the precise period, when they are to become the first people that ever the world beheld, is pointed out. This is an allusion common to the best-informed, as well as the most ignorant Americans. Cooper is for ever pointing out to his countrymen the

millennium of 1920. In the northern states, the character of the people approximates more nearly to the Scottish standard than to that of any other, according to Mr Mellish; and Mr Silliman, an American traveller from New England, who visited England in 1805 and 1806, confesses that he was struck with the great similarity in domestic manners between the people of the northern states and those of the parent-country; and was surprised that a lapse of almost two centuries, and a state of things so widely different in both as to many important particulars, should not have produced a greater alteration in the new country from the original manners of the old. It must be observed, that the population of the northern states is comparatively pure and unmixed, compared with that of the other states of the Union. Few emigrants go to that quarter, as the prospects are not inviting; and the bulk of the original settlers were persons of a very different stamp from those who now emigrate. These carried with them principles and habits of strict morality and genuine piety; and though much of the power of godliness may have been lost among their descendants, yet more of its form, and even of its reality, is preserved there, than in the rest of the states. "Education," remarks Mr Duncan, "which prevails much more universally throughout the New England states than in any other portion of the Union, and is frequently accompanied with religious instruction, has given to the natives a very decided cast of national character, resembling, in many respects, that for which the Scots among Europeans have long been distinguished. The kind of education also in the two countries, is remarkably similar: it is more general than accurate, and more useful than elegant, imparted by means of district or parochial schools, and, in this country, almost entirely without expense to those who receive it. The characteristics of a New Englander are, intelligence, sobriety, enterprise, perseverance. When he finds his range at home too limited to admit of a sufficiently successful application of these qualities, he betakes himself to distant regions, and traverses one state after another, till he finds some nook in which he can establish himself with advantage. In the southern and western states, many of the most successful merchants, the most industrious farmers, the most money-making land-speculators, are natives of New England; and scarcely is there a station in society, or a mode of obtaining a livelihood, in which there will not be found a full proportion of them. If you meet a waggon in some remote country-road, with a cheerful-looking family, and a tall, slender figure whistling along, with an axe over his shoulder,—it is a Yankee backwoods-man on his march for the wilderness of Illinois or Tennessee; where he will build a log-house, clear a few acres of land, sell the whole at a profit to the next comer, and start with the waggon a second time, to penetrate some hundreds of miles farther into the woods, and repeat the process. If you see at the turnpike-gate of a country-town, a light carriage resembling a British taxed-cart, built up all round with a pile of assorted packing-boxes and trunks,—it is the travelling-store of a New England pedlar, who is marketing his wares, *swopping*, or selling, or buying, as he and his customers can agree about it; *guessing* away with every one he meets, but turning all to good account in the end. In all those bye-ways of getting on in the world for which America affords unexampled facilities, none are found to succeed like the natives of New England. The consequence of this adventurous spirit is, that they attract, along with their prosperity, a considerable share of the envy and ill-will which successful rivalry generally excites. Perhaps, there are instances in which cunning, rather than ho-

nesty, has characterized their enterprises; but, among so many adventurers, it is not surprising that some should be unprincipled; and, of course, a well educated and ingenious rogue has a fearful advantage over ignorant and stupid ones. From whatever cause it may have arisen, it is certain that, in the south, there is a strong prejudice against them; and it is very customary there to say many hard things of the Yankees, which are true only of a small number, and those the very worst of them."

As we advance to the S. the character deteriorates,—becomes more diversified and less distinct; and the manners are less pure and simple, from the perpetually increasing mixture of new settlers with old inhabitants. On the S. of the Patomac, the character appears sensibly changed, and the manners are almost entirely those of the West Indies. To whatever cause this change be justly attributable, it is visible in every usage of life. Travellers have remarked the total want of all those games and sports that obtained for our country the appellation of "merry England."

Mr Hodgson's remarks on American character seem to us fair and judicious. "If," says he, "in opposition to their republican principles, we divide the Americans into classes, the first class will comprehend what are termed the Revolutionary Heroes, who hold a sort of patent of nobility, undisputed by the bitterest enemies to aristocracy. Their numbers, indeed, are few; but they have too many peculiar features to be comprised in the description of any other class of their countrymen. Many of them were educated in England; and even those who never travelled, had generally the advantage of the best English society, either colonial or military. They were formed in the English school; were embued with English associations; and, however active they were in resisting the encroachments of the mother country, they are, many of them at least, delighted to trace their descent to English families of rank, and to boast of the pure English blood which flows in their veins. In the families of these patricians, in which I have spent many agreeable hours, I met with nothing to remind me that I was not in the society of that class of our well-educated country gentlemen, who occasionally visit the metropolis, and mingle in fashionable or political life. The *old* gentlemen of this class, are indeed *gentlemen* of the old school; and the young ladies are particularly agreeable, refined, accomplished, intelligent, and well-bred.

"The second class may include the leading political characters of the present day, the more eminent lawyers, the well educated merchants and agriculturists, and the most respectable of the *novi homines* of every profession. It will thus comprise the mass of the good society of America; the first class, which comprehends the best, being very limited, *sui generis*, and about to expire with the present generation. The manners of this second class are less polished than those of the corresponding class in England, and their education is neither so regular nor so classical; but their intellects are as actively exercised, and their information at least as general, although less scientific and profound. The young ladies of this class are lively, modest, and unreserved; easy in their manners, and rather gay and social in their dispositions: at the same time, they are very observant of the rules of female propriety; and if they ever displease, it is from indifference, rather than from either bashfulness or effrontery. Their appearance is generally genteel and agreeable; their figures are almost universally good, and they dress remarkably well,—in this city (Philadelphia), indeed, more to my taste than in almost any place I recollect. For this, they are indebted, partly to the short passages from Europe, which waft

across the Atlantic the latest fashions from London and Paris; partly to their accommodating tariff, which places within their reach the beautiful Canton crapes, and all the most elegant materials for dress which American enterprise can collect in the four quarters of the globe; and partly to the simplicity of the Quaker costume, which has had a happy and sensible influence on the taste and habits of the community at large. Their tone of voice, which is generally a little shrill, and their mode of pronouncing a few particular words, are the peculiarities of manner which, I think, would be most remarked upon in the best society in England. Generally speaking, also, the style of female education in America is less favourable to solid acquirements, than with us. The young ladies here go earlier into society than in England, and enter sooner into married life; they have not, therefore, the same opportunities for maturing their taste, expanding their intellect, and acquiring a rich store of well-arranged and digested knowledge, as those have, who have devoted to improvement the longer interval which climate or custom has, with us, interposed between the nursery and the drawing-room. In the highest class, especially in Carolina, there are many exceptions to this general remark; and among the young ladies of Boston, there appeared to me to be, if less of refinement than in the Carolinians, yet, a very agreeable union of domestic habits and literary taste, and great kindness and simplicity of manners.

"The third class may comprehend all below the second; for, in a country where some would, perhaps, resent even the idea of a second class, this division is sufficiently minute. This class will include the largest proportion of the American population; and it is distinguished from the corresponding classes of my countrymen, (the little farmers, innkeepers, shop-keepers, clerks, mechanics, servants, and labourers,) by greater acuteness and intelligence, more regular habits of reading, a wider range of ideas, and a greater freedom from prejudices, provincialism, and vulgarity. It is distinguished, also, by greater *coldness of manner;* and this is the first of the charges against the nation, generally, on which I shall remark.

"As respects the highest classes, I think this charge is, in a great measure unfounded: their reception of a stranger, at least, appeared to me as frank and as warm as in England. To that part of the population which I have included in the third class, the charge attaches with strict propriety; and in many cases, their coldness amounts to the English 'cut direct.' At first, it incommoded me excessively, especially in the women in the country, who showed it the most; and I have sometimes been disposed to ride on, not in the best temper, when, arriving at an inn after a long stage before breakfast, and asking very civilly, 'Can we have breakfast here?' I have received a shrill 'I reckon so,' from a cold female figure, that went on with its employments, without deigning to look at us, or to put any thing in motion to verify its reckoning. In due time, however, the bread was baked, the chicken killed, and both made their appearance, with their constant companions, even in the wildest part of America, ham, eggs, and coffee. The automaton then took its place; and if I had been an automaton also, the charm would have remained unbroken; but I do not remember an instance in which the figure did not converse with good humour before I rose. Very often, however, our reception was warm and friendly: and the wife, or daughter, who poured out my coffee, was frank, well-bred, obliging, and conversable. The coldness of the men, also, I found to be confined principally to their manner, and to indicate no indis-

position to be sociable and accommodating. On the contrary, in a route of more than seven thousand miles, of which I travelled nearly two thousand on horseback, and the rest in steam-boats and stages, I have found the various classes as accommodating and obliging as in England: sometimes, I confess, I have thought more so. Some parts of Georgia and the Carolinas might suggest a slight qualification of this remark; while East Tennessee and the valley of the Shenandoah might almost claim a warmer eulogy. In the course of my route, I have met with only one instance of personal rudeness, and that too slight to be mentioned, except for the sake of literal accuracy. My servant's impressions correspond to mine. On questioning him at the termination of our route, he said, 'he thought the Americans quite as ready to serve us, and one another, as the English; and that they were continually expressing their surprise to find Englishmen so civil.' Now, our civility was nothing more than would naturally be suggested by a recollection of the institutions of the country through which we were travelling, and a general desire to be pleased with friendly intentions, however manifested. The coldness of manner in the Americans, however, is a great defect, and must prejudice travellers till they understand it a little.

" With regard to the *vanity* which is charged upon them, this foible is admitted by all their sensible men, who are disgusted with the extravagant pretensions maintained, in inflated language, in their public prints. I have heard some of them jocosely say, that they expect their countrymen will soon begin to assert, that they are not only the most powerful and the most learned, but the oldest nation in the world. In good society, however, I have seldom witnessed this vanity in any remarkable degree: and I really think, I have seen more of it in the Americans I have met with in England, than in the whole range of my observation since I landed in this country. When I have made the concessions to which I thought the Americans fairly entitled, I have not often observed a disposition to push their claims too far; but, on the contrary, a readiness to suggest some point of comparison in which Great Britain has obviously the advantage. And without attempting to defend an acknowledged defect in their character, I must confess, the Americans have some excuse for their vanity. Descended (which of us will dispute it?) from *most illustrious ancestors*, possessing a territory, perhaps, unequalled in extent and value, victorious in the infancy of their history, in a struggle for their independence, and rising with unprecedented rapidity in the scale of nations, they must be more than mortal if they were not elated with their condition. And if sometimes they may appear to draw too heavily on the future, and to regard America as what she is to be, rather than what she is, I must own, that I never yet met with an American who carried his views of her future greatness so far as I should be disposed to do, if she were my country, and if I could be satisfied of the predominating influence of religious principle in her public councils."

A systematic taste for cleanliness is said to form a prominent feature of American character; this external cleanliness is visible in the streets, and the dress of both sexes, as well as in the houses. Almost all are dressed in a neat and clean manner; and nobody ever publicly appears in those offensive rags which in other countries too often shock the eye. The houses, built of brick or wood, are always freshly, and often agreeably painted; though possessed of little fine furniture, yet no requisite for comfort is wanting, and every thing is put and kept in the nicest order.

The Americans are generally tall, handsome, with strong and well-proportioned frames, and fresh and ruddy complexions; but their features are in general said to want delicacy, and their physiognomy has little expression; the women have more of that delicate beauty which belongs to their sex, and generally have finer features and more expression in their countenances. They are mostly tall, with light and airy shapes, fine heads, and complexion of a dazzling whiteness. "Without participating," says Ward, "in all Mr Waterton's enthusiasm with regard to the American women, it is difficult for the most casual observer not to be struck with their appearance; nor do I know any part of the world (not even excepting England) where the display of female beauty is more striking than at New York and Philadelphia, where from the warmth of the climate, the light dress of the S. of Europe is seen in conjunction with the freshness and bright colouring of a northern complexion." The American women are characterized generally by a greater degree of reserve and coldness of manner, than even is imputed by foreigners to the English. The language of gallantry, Mr Cooper says, is never tolerated. "A married woman would consider it as an insult, and a girl would be apt to laugh in her adorer's face." The married women are rarely seen foremost in the scenes of gayety; but between young persons of both sexes great frankness of intercourse is permitted, without the least danger of its running into impropriety. Describing the ladies of New York, a French writer says: "The women follow here in their dress the French fashions, but are entirely American in their manners; that is to say, they devote almost their whole existence to the management of their families and the education of their children. They live in general very retired; and although the greater number of them are able to furnish the resources of an agreeable and lively conversation, they nevertheless occupy but little room in assemblies, where the young girls alone seem to have the right to reign. The latter, it is true, derive from nature and education all the means of pleasing. The unlimited liberty which they enjoy without ever abusing it, imparts to their manners a grace, a freedom, and a modest carelessness, which are not always found in our saloons, where, under the name of reserve, we impose on our young girls so irksome a formality. If the American wives are remarkable for their strict fidelity to the conjugal ties, the young women are not less so for their constancy to their engagement." "The manners of the American women strike me," says a female writer, "as peculiarly marked by sweetness, artlessness, and liveliness. There is about them, at least in my eyes, a certain untaught grace and gayety of the heart, equally removed from the studied English coldness and indifference, and the not less studied French vivacity and mannerism. They enter very early into society; far too early, indeed, to be consistent with a becoming attention to the cultivation of their minds. I am, however, acquainted with striking exceptions to this general practice. The society collected in large evening assemblies is almost exclusively composed of the unmarried young. A crowded room is in this way a pretty scene for a quiet observer to look into for half an hour; but, if he has survived the buoyant spirits of first youth, he will then find it better to walk home again. The youth of both sexes here enjoy a freedom of intercourse unknown in the older and more formal nations of Europe. They dance, sing, walk, and 'run in sleighs,' together, by sunshine and moonshine, without the occurrence, or even the apprehension of any impropriety. In this bountiful country, marriages are seldom dreaded as imprudent, and therefore no care is taken to prevent the contracting of early engagements.

It is curious to see how soon these laughing maidens are metamorphosed into fond wives and attentive mothers, and these giddy youths into industrious citizens and thinking politicians."

Duels are frequent in the United States, especially in North Carolina, where more duels are fought than in all the nine states S. of Maryland. Several efforts have been made to repress this pernicious practice, but to no purpose. There the criminal may be prosecuted for killing his antagonist, but, as with us in too many instances, a verdict of simple homicide is uniformly given by the jury; and the man who, by the laws of reason and religion, is condemned as more guilty than an ordinary murderer, is received into society without any marks of disapprobation. Quarrels are frequent in the southern states; and the modes of deciding these are of the most brutal description. These modes are *gouging, kicking,* and *biting;* and the combatants pride themselves upon the dexterity with which they can pluck out an eye, bite off a nose, or break a jaw with a kick of the foot! Many, but languid attempts, have been made to abolish these inhuman practices, by the different legislatures. Gouging is performed by twisting the fore-finger in a lock of hair near the temple, and turning the eye out of the socket with the thumb nail, which is suffered to grow long for that purpose.

In no country do politics engross so much of public attention as in the United States; there, all are politicians, and every man a federalist or an anti-federalist. The eagerness of the people for news, far exceeds that witnessed in our own country. Newspapers are universally diffused; and there is scarcely a poor owner of a miserable log-hut, who lives on the border of the stage-road, but has a newspaper left at his door. Upon political subjects they are often violent and headstrong, and the scurrility of the political press is notorious, and deplored by many amongst themselves. Unfortunately, it is too much in the hands of disaffected Europeans, who have endeavoured to cherish in Americans their peculiar political antipathies, particularly against this country. It is certain—and we state it for the honour of America herself—that by far the greatest part of those newspapers which laboured so assiduously to excite the last war between America and Great Britain, and who during that war endeavoured to exasperate the latter country by every imaginable insult and audacious falsehood, were edited, not by Americans, but by English, Scotch, and Irish emigrants.

CHAP. V.—LANGUAGE AND LITERATURE—RELIGION—EDUCATION.

THE languages spoken in the United States, exclusive of those of the indigenous tribes, are as numerous and diversified as the nations to which its emigrant population belong, namely: English, French, German, Dutch, Swedish, Spanish, and Gaelic. All these emigrants retain, in a greater or less degree, their native language, in which they perform their respective religious services, converse, and transact mutual business. The English language, however, is by far the most prevalent, and will in process of time become the universal instrument of oral communication. In it, all the public business of the different states is transacted; their laws are promulgated, their records kept, and their diplomatic correspondence is carried on in English. In the northern states,

English is spoken in great purity, and pronounced with great propriety, by persons of education. In the middle states, where the population is more mixed, the language is proportionally corrupted, especially in pronunciation. There are no provincial dialects in America. Emigrants from all parts of Great Britain have met and intermixed with each other, and with the natives of the country, and the peculiarities of dialect, therefore, have necessarily melted down into the general speech, which is common English. The low bred Londoner does not there transmit his vulgar *shibboleth;* and the son of the Northumbrian is free from the *burr* which sticks in the throat of his father. Dialects can only be preserved by collective bodies speaking the language which they acquired in their youth, and cannot therefore continue in promiscuous colonies. But though there are no provincial dialects, yet there are, and must be, in the present state of the population, vulgar dialects, or vulgarisms, which exist more or less in all countries. With respect to *Americanisms*, as they are usually called, it would be unphilosophical in the extreme to condemn them by wholesale as contraband. The vocabulary of a living language never can be limited; new words will be frequently coined; and if they are struck in the mint of analogy,—if the standard be legal, and the die good,—they must become current coin. Many of the words in current use in America are either antiquated words carried over by the first settlers, or provincialisms still familiar in the mother-country, which have more recently emigrated, and are justly the subject of as much ridicule in America as they are in Great Britain. *I guess* is a colloquialism not confined to America; but it is so favourite a term there, that the people "guess as how" about every thing. Yet there is no danger of this vulgarism becoming an authorised mode of expression even among transatlantic writers. The French and Spanish languages are confined chiefly to the states of Upper and Lower Louisiana; and will at no very distant epoch be completely superseded by the English, which will in process of time be the vernacular language from the Atlantic to the Pacific, and from the mountains and the gulf of Mexico to the Frozen sea,—an extent of country double that of the European continent.

Knowledge, in the extended sense of the word, is not a characteristic of Americans. On the contrary, many districts, and even whole states, are remarkable for the prevalent ignorance. So little exertion has been made by native Americans in the various departments of literature, that some philosophers have been induced to conjecture that there is something in the climate of the New World which is unfavourable to the existence or development of genius. Buffon and Raynal maintain that nature degenerates in America; and that the mind loses the vigour there which it has in other countries. To this assertion Jefferson—above 30 years ago—made the following reply:—"When we shall have existed as a people as long as the Greeks did before they produced a Homer, the Romans a Virgil, the French a Racine and Voltaire, the English a Shakspeare and Milton, should this reproach be still true, we will inquire from what unfriendly causes it has proceeded, that the other countries of Europe and quarters of the earth should not have inscribed any name in the roll of poets. In war we have produced a Washington, whose memory shall be adored while liberty shall have votaries, whose name will triumph over time, and will in future ages assume its just station among the most celebrated worthies of the world, when that wretched philosophy shall be forgotten, which would arrange him among the degeneracies of nature. In physics we have

produced a Franklin, than whom no one of the present age has made more important discoveries, nor has enriched philosophy with more ingenious solutions of the phenomena of nature. We have Mr Rittenhouse, second to no astronomer living: that in genius he must be the first, because self-taught. As an artist, he has exhibited as great proofs of mechanical genius as the world has ever produced. He has not indeed made a world; but he has, by imitation, approached nearer its Maker than any man who has lived from the creation to this day. As in philosophy and war, so in government, in oratory, in painting, in the plastic art, we might show that America, though but a child of yesterday, has already given hopeful proofs of genius, as well of the nobler kinds, which arouse the best feelings of man, which call him into action, which substantiate his freedom, and conduct him to happiness, as of the subordinate which serve to amuse him only. We therefore suppose that this reproach is as unjust as it is unkind; and that, of the geniuses which adorn the present age, America contributes its full share. For, comparing it with those countries where genius is most cultivated, where are the most excellent models for art, and scaffoldings for the attainment of science, as France or England for instance, we calculate thus: The United States contain three millions of inhabitants, France twenty millions, and the British islands ten. We produce a Washington, a Franklin, a Rittenhouse; France, then, should have half a dozen in each of these lines, and Great Britain half that number equally eminent. It may be true that France has; we are but just becoming acquainted with her, and our acquaintance so far gives us high ideas of the genius of her inhabitants." While it must be owned that Jefferson argues in a good cause, his reasons here are certainly not of the most convincing kind. The cases produced are not exactly parallel. We are not to date the existence of Americans from the revolution which procured them independence; we cannot imagine that every human faculty in this part of the world, before that time, lay dormant; and that then only it began to exert itself. The greater part of the states had been inhabited for two centuries; and, during great part of that time, had been possessed of opulence and freedom. Besides, the Americans, even at the beginning of that period, were not commencing their career of improvement. They came from the most civilized nations of the world, and brought with them all their arts and elegancies. An Englishman, it is true, who in Elizabeth's time went to America, went to inhabit a wilderness; but it was by no means necessary that he himself should become a savage. The state of society in the rising states kept progress with that in the mother-country; intercourse with the civilized parts of the world was frequent, and every improvement soon found its way to the colonies. We are not then to date the commencement of American improvement from their declaration of independence; nor even from the first emigrations; we must extend our views backwards to the origin of those nations from which they proceeded, and consider that they carried with them the accumulated improvements of many hundred years. The Americans, in this sense, have existed longer than the Greeks when they produced a Homer; they have existed as long as Britain or France themselves. They ought, therefore, to have produced men of genius, not according to the duration of their alleged existence as a nation, but according to their population and resources. That they have done so, none, it is presumed, will be bold enough to assert. Switzerland and the Dutch states separately contained less than three millions each, and yet have contributed

far more men eminent for science and literature than America. In the sciences of astronomy, geography, and mathematics, no eminent names, with the exception of Rittenhouse, have yet appeared. Extensive erudition is very rare. In poetry, no eminent productions have appeared but the Columbiad of Barlow; and its reputation is not such as to secure its immortality. With the solitary exception of the celebrated Jonathan Edwards, America has produced no great metaphysicians. Whether he be viewed as a theologian or metaphysician, Edwards was one of the greatest men of the 18th century; but, for more reasons than one, we presume, his name was omitted in the roll of Jefferson's worthies. In political economy and the fine arts, no eminent names have yet made their appearance in America. Dehon and Irving, however, are of a very polished school; and Channing is a splendid writer.

There must be some cause for this deficiency, of which the existence can scarcely be denied. The impropriety of recurring to physical causes has just been mentioned. It remains to inquire, therefore, whether there may not have been moral causes sufficient to produce the effect. One cause immediately occurs, and another will hardly be necessary. Wealth has, till very lately, been the object of every American adventurer, and the accumulation of it the grand end of every American life. The man of parts, who, prior to the revolution, had here made his fortune, seldom thought of enjoying it here. He generally returned to his native country, and there displayed those powers, which might not only have attained for himself celebrity in America, but might, by their example, have excited the emulation of many, who, for want of such an example, never attempted the strife of excellence. Wealth is never the chief aim of men of true genius: such men, therefore, seldom visited America, and when they did visit it, they still more seldom remained. The first adventurers found sufficient employment in clearing the country, and raising provisions for their sustenance. For these purposes they found little knowledge necessary. Learning soon became unfashionable, and remained so, till the increase of wealth brought it into demand, rather as a luxury than as a truly valuable acquisition. Teachers became scarce, where they found so little encouragement; and books being little sought after, few were carried over, and these few, to indemnify for a tedious sale, were not disposed of but at an exorbitant price. Acquired knowledge, therefore, became necessarily rare; and, without this, natural knowledge entitles few to rank among men of genius. Among other causes of this state of things in America, Bristed enlarges on "the unfortunate practice of entering upon active life at too early an age. Partly from the condition of society, and partly from the eager appetite for wealth, which especially characterises all young and thinly-settled countries, divines, lawyers, physicians, and merchants, rush into the occupations of active life, almost before they reach that period which the wisdom of common law allots as the termination of infancy. Plunging so early into the minuter details of practical employment, prevents the due development of the intellectual faculties; and after a while renders the mind, from disuse, both unable and unwilling to direct its attention to the more abstracted pursuits of literature and science. There is a salutary adage in the old law books, which runs thus, "In juvêne theologo conscientiæ detrimentum; in juvene legislatâ bursæ detrimentum; in juvene medico cœmeterii incrementum:" the consciences of his parishioners suffer by a young clergyman; the purse of his clients diminishes in the hands of a young lawyer; and the churchyard increases by the labours of

a young physician. This adage, however, has *not* yet found its way into the United States, where the young people of all classes are precipitated into business during childhood. The consequences of this precocious publicity are, a superficial elementary education,—a perpetual pruriency of prattle upon all subjects, without a due fathoming of the depths of any one of them,—and an entailed disability of fully developing the understanding, which is narrowed in early life, by being prematurely absorbed in the minute but necessary details incident to every practical calling. Whence, with their due proportion of genius, in common with all other nations, and with the advantage of a more general diffusion of popular intelligence than is to be found in any other community, too many of our citizens, in *all* the learned professions, begin, continue, and end their career, on much narrower ground than their native capacity, properly unfolded by previous general information, would enable them to cover. Another obstacle to the growth of literature in the United States, arises from the great propensity to consume the talent of the country in the effusion of newspaper essays and political pamphlets, instead of concentrating it in the production of some regular, consecutive work. In consequence of these desultory intellectual habits, periodical journals, as Reviews and Magazines, seldom last long. The author can obtain little or no assistance from others in his literary efforts; the persons competent to aid him in such an undertaking being comparatively few throughout the Union, and those, for the most part, actively employed in some laborious calling; and it is not in the power of any one man, however gifted with talent, adorned with knowledge, and armed with industry, to execute, *alone*, a literary journal as it ought to be executed. Add to this, the universal vice of the United States, a perpetual craving after novelty. The charge which Demosthenes brought against his own countrymen, that they were continually running about, and asking, 'Is there any thing new?' is equally applicable to the Americans. This eternal restlessness and desire of change, pervade the whole structure of our society: the same man will start into life as a clergyman, then turn lawyer, next convert himself into a farmer and land-jobber, and, taking a seat in congress, or some state legislature, by the way, end his days as a merchant and money-broker. The people are incessantly shifting their habitations, employments, views, and schemes: the residence of a servant does not average two months in each place; the abode of a whole household is generally changed once a-year, and sometimes oftener; numerous families, that have been previously settled in the elder states of New York, Connecticut, and Massachusetts, are continually migrating into Ohio, or the territories of Alabama, Illinois, and Mississippi; the executive, the legislators, the magistrates, and officers of all kinds, are changed biennially, or annually, or half-yearly, according to the greater or less infusion of the restless spirit of democracy into our various forms of government." These causes are all hostile to the successful cultivation of literature in this country; at the same time, there is a wide diffusion of knowledge throughout the states. The cheap publication of books encourages a demand and supply unexampled in any European state. A few facts will astonish the reader as detailed in Ingersoll. A capital of *L.*125,000 was invested in one edition and reprint of Rees' Cyclopædia, and many classes of the engravings are equal to those of the British artists. There have been eight editions, comprising 7,500 copies of Stewart's Moral Philosophy, published during the last twenty years; a greater number we suspect than has been sold in its own country: this latter fact is a remarkable proof of the in-

quiring taste and reflective character of the public mind in the Union. 200,000 copies of Sir Walter Scott's novels have issued from the American press in the last nine years! Periodical works and newspapers abound in extraordinary and countless quantity. Four thousand copies of the Edinburgh and Quarterly Reviews are republished there, and the same number of copies of a home periodical, of real and increasing celebrity, the North American Review. The itinerant book trade is peculiar to this knowledge-seeking country: more than two hundred waggons travel through the country loaded with books for sale!

State of Education.] The northern states have made the most liberal provisions for public education. The plans adopted for this purpose, by the different legislatures, seem well calculated to answer the end designed; but to enter into any detail respecting the various modes in which instruction is communicated to the community, would be inconsistent with the plan of our work. It is sufficient to observe, that the great body of the New England population can read and write, and that many of them are respectably acquainted with the classical languages, and elementary sciences. From the report of one of the commissioners, the school-fund of Connecticut appears to be 1,858,074 dollars, equal to *L*.371,000 British sterling. The amount of division to the common schools annually, in 1822, was 67,791 dollars, which enables the state to expend 60,000 dollars annually on schools; and will soon afford 90,000 to 100,000 dollars a-year for the same object. There is a rule to enforce a distribution of this fund to the different district-schools, according to the number of children in each, between the ages of 4 and 16. The mode pursued is this: the inhabitants establish school-districts, and appoint a committee in each district, whose duty it is to manage the concerns of the district and provide an instructor for the school, with the consent of the district and the approbation of the visitors. There are 1,580 schools in the state of Connecticut alone. The same principle and regulations apply to all the western states in the Union. The new states have made immense appropriations of land (from the sale of which the fund is raised) for the purpose of general education; thus is laid the foundation to support schools and colleges to the fullest extent wanted. In the Southern states, the state of education is deplorable. Before the revolution, the wealthy Carolinians sent their children to Europe for their education; since that period, they have sent them to the northern states,—a most unequivocal testimony of their own inferiority.

Colleges.] There are in the United States 43 incorporated colleges or universities.

The number of instructors in 32 colleges is . . .	217
The number of graduates in 30, in 1828, was . .	652
The number of under-graduates in 33 colleges, in 1828 and 1829,	2,809
Number of volumes in 30 college libraries, .	128,118
Number of volumes in 25 students' libraries, . .	66,730

Yale college in Connecticut, and Harward university in Massachusetts, have the greatest number of teachers and pupils. There are also 18 theological seminaries, of which 11 date their origin since 1820. From calculations made in the year 1830, it appears that the number and proportion of college-students in each state of the Union, compared with the population, is as follows:—In Maine, 128 students, being 1 student in 3,300 persons; New Hampshire 139, or 1 in 2,200; Vermont 138, or 1 in 2,000; Massachusetts 543, or 1 in 1,070; Rhode Island 34, or 1 in 2,700; Connecticut 205, or 1 in 1400; New York 543, or 1 in 3,700;

New Jersey 115, or 1 in 2,900; Pennsylvania 436, or 1 in 3,200; Delaware 10, or 1 in 8,000; Maryland 171, or 1 in 2,600; District of Columbia 38, or 1 in 1,400; Virginia 370, or 1 in 3,200; North Carolina 96, or 1 in 7,500; South Carolina 214, or 1 in 2,800; Georgia 107, or 1 in 3,800; Alabama 33, or 1 in 12,000; Mississippi 28, or 1 in 4,700; Louisiana 18, or 1 in 17,000; Kentucky 250, or 1 in 2,600; Ohio 169, or 1 in 5,800; Tennessee 144, or 1 in 4,000; Indiana 4, or 1 in 75,000. It is estimated, that, in the New England states, there is now, on the average, one student in college for 1,650 inhabitants; in the Middle states, 1 for 3,400; and in the states S. and W. of Pennsylvania, 1 for 4,400. South Carolina was long without any college; it has now three. A state college was established at Columbia, in 1801, by an act of assembly. This seminary possesses, though yet in its infancy, a select and extensive library, and a philosophical apparatus, equal to any in the United States. In Georgia, a university was founded in 1801, at Louisville; and in each county, provision is made for the institution of an academy. The Roman Catholics have a college at Georgetown, in Virginia; and the Methodists another at Abingdon, called Cokesbury college, in honour of their late leader, Dr Coke, which is said to be under excellent regulations. In the recently settled territories to the west of the Alleghany mountains, it would be absurd to expect that much attention should be paid to literature of any kind. There is, however, a society instituted in the state of Tennessee, for promoting useful knowledge, and there are also an academy and several grammar-schools. In the state of Mississippi, a seminary denominated Jefferson College, in honour of the late president, has been founded. In entering the state of Pennsylvania, the aspect begins to change. At Philadelphia is a university, founded during the revolutionary war; as also a college, and an academy; all of which are now united into one seminary. Dickenson College was founded in 1783. Franklin College was founded at Lancaster, 66 miles W. of Philadelphia, in 1787. This College was intended solely for Germans, who compose a great proportion of the inhabitants of this state. In the state of New York, a college was founded at the capital, by the British legislature, in 1754. It is called Columbia College. Another college has been since founded, at Albany. In New Jersey, no public provision is made by law for schools. Teachers, therefore, are supported only by the voluntary contributions of the inhabitants, which are so despicable that no man of abilities will degrade himself by accepting them. In different parts of this state, however, are found several academies and grammar-schools; and two universities, namely, Queen's College and Nassau Hall. The chief literary institution in all the United States is Harvard University, in respect of its professorships, library, and philosophical apparatus. It is situated in the state of Massachusetts, at Cambridge, 3 miles W. of Boston. This university, by the constitution of Massachusetts, is under the inspection of the governor, lieutenant-governor, president of the university, and the congregational ministers of Boston, Charleston, Cambridge, Waterton, Roxbury, and Dorchester. The property of the university is managed by a distinct corporation of 7 members.[4] In New Hampshire is the college of Dartmouth,

[4] "About three miles from Boston, is Harvard College, the Cambridge University of America; the most ancient and most amply endowed collegiate establishment in the Union. The foundation of this public seminary was laid in the year 1636, by the appropriation of 400*l*. for the purpose of a public school, by the General Court of the infant colony. In 1638, the Rev. John Harvard, of Charleston, bequeathed to it one-half of his property, amounting to nearly 800*l*. The institution was now dignified

founded in 1769, by Dr Wheelock, under the patronage of the earl of Dartmouth, and several private benefactors. It was originally intended for the instruction of the savages; but is now an endowment for the youth of the Northern States. In the state of Connecticut, is Yale College, founded by the governor of that name, in 1700.[5]

with the name of Harvard College; and the town, which had hitherto been called Newtown, was named Cambridge, in honour of that seat of science in England, at which a great number of the principal colonists had received their education. Thus, remarks Dr Dwight, 'within ten years after the little flock which commenced the settlement at Massachusetts, landed at Salem, and within eighteen years after the first foot was set on the shore of Plymouth, a college was endowed by them, and established.' In 1650, the first charter was granted by a General Court, constituting the President and Fellows of the College a corporate body. This charter was confirmed by the constitution of the state, when the style of 'the University in Cambridge' was first legally given. The professorships of divinity and of mathematics and natural philosophy were founded by Mr Thomas Hollis, a merchant of London, in 1722 and 1726; that of Hebrew, by the Hon. Thomas Hancock, an eminent merchant of Boston, in 1765. Other professorships have been added from time to time, by subsequent benefactions. They now amount to upwards of twenty, including the medical department, which is an integral part of the institution, although, for the greater convenience of medical students, it occupies buildings in Boston. The university now comprises five colleges and a new hall, (erected in 1814, at an expense of nearly 17,000*l.*) containing the chapel, lecture-rooms, dining-rooms, and kitchen: this hall, which is of fine white granite, is reckoned the handsomest building in Massachusetts. The buildings stand in an inclosed plain, fourteen acres in extent, sheltered on three sides by forest trees, and in the immediate vicinity of an extensive common. The library, containing (in 1820) upwards of 25,000 volumes, is the best in the United States. The philosophical apparatus is also valuable. The museum has been enriched by a collection of mineralogical specimens, principally presented by Dr Lettsom of London, and the Paris Committee of Public Safety. There is also a valuable collection of anatomical wax models, the workmanship of Italian artists. The academical course is completed in four years, at an expense of not less than about 100 guineas a-year: in most cases, the students expend a great deal more. 'The literary and scientific reputation of Harvard University,' says Mr Duncan, 'stands very high; and except Yale College, none in this country can contest with it the pre-eminence. There is one feature, however, in its character, which excites the most melancholy reflections. Its theological creed is undisguised Socinianism; and it is said, that nearly all the professors are of these sentiments. The state of religion in the capital of New England is far from cheering. Whether the contagious influence spread from Harvard University to Boston, or from Boston to it, I know not; but, though both were once distinguished for evangelical sentiments, both are now alike characterized by the lamentable predominance of Socinianism."'—*Modern Traveller.*

[5] "Yale college was originally established at Saybrook, in the year 1700, and was incorporated by the colonial legislature in the following year. The project of establishing a college in Connecticut, appears to have been seriously entertained fifty years before; but it was checked, Dr Dwight informs us, by well-founded remonstrances from the people of Massachusetts, who justly urged, that the whole population of New England was scarcely sufficient to support one institution of this nature, and that the establishment of a second would endanger the prosperity of both. These objections put a stop to the design for the time; it was not, however, lost sight of. In 1718, the infant institution was removed by the trustees to Newhaven. It was originally intended simply for the education of young men for the ministry; but, as it gathered strength from individual liberality and public patronage, the range of its plan of study was gradually extended, until it now embraces the more essential parts of a complete literary, scientific, and medical education. The college received its name in commemoration of the beneficence of the honourable Elihu Yale, a son of one of the first settlers, who went to England in early life, and thence to India, where he became governor of Madras; and on his return to England, he was elected governor of the East India company. From this gentleman, the college received donations at various times between 1714 and 1718, to the amount of £500 sterling; and a short time before his death he directed another benefaction to the same amount to be transmitted, but it was never received. Another of its early benefactors was the celebrated dean Berkeley, afterwards bishop of Cloyne, who came to America in the year 1732, for the purpose of establishing a college in the island of Bermuda; a project to which he nobly sacrificed considerable property, as well as time and labour. His efforts being frustrated by the failure of the promised support from government, he presented to this institution a farm which he had purchased in Rhode island, and afterwards transmitted to it from England a very valuable collection of books,—"the finest that ever came together at one time into America." Sir Isaac Newton and many other distinguished men presented their works to the library. Although founded under the sanction of the colonial

Something like a taste for the fine arts is beginning to dawn upon America. For cultivating and diffusing these, a society was instituted, in 1803, at New York. A present of drawings and paintings was made to the society by Bonaparte, when he held the sway of France. The building appropriated to this collection of statues and paintings, was formerly a circus, and already presents a valuable series of casts of the most admired ancient statues. Another academy of the fine arts has been since established at Philadelphia.

Newspapers.] There were but 7 papers in the United States in 1750, and in 1810 there were 359, (including 25 published daily) which circulated 22,200,000 copies in the year. In 1823 they had increased to 588, and in 1828 they amounted to 892, of which Pennsylvania alone had 185, and New York 161. The number of copies circulated in the year by these journals exceeds 30,000,000. The whole of continental Europe, where the press is chained down by royal and priestly jealousy, certainly does not support half the number of journals which exist in the United States.

Religion.] Before we enter upon an enumeration of the various religious sects in the United States, it must be premised, that since the American revolution, no religious establishment is recognized by the federal government. As this is a matter of some importance, it shall be given in Dr Morse's own words: "The constitution of the United States provides against the making any law respecting an establishment of religion, or prohibiting the free exercise of it; and in the constitution of the respective states, religious liberty is a fundamental article. Religion is here placed on its proper basis, without the feeble and unwarranted aid of the civil power: it is left to be supported by its own evidence, and the lives of its professors, and the Almighty care of its divine author." "In America," says Duncan, "the

legislature, and partially endowed by it, the college was for a long time indebted for its support chiefly to individual patronage; the whole amount bestowed by the colonial legislature during the first 90 years of its existence, did not much exceed 4,500*l.* sterling. But when the federal government was consolidated, a grant was made, in 1792, to Yale college, out of a fund created by uncollected arrears of war-taxes, by which ultimately 60,000 dollars (13,500*l.*) were realised; and to this day, nearly the whole of the funded income arises from this source. The affairs of the college are under the superintendence of a board of trustees, consisting of the governor and lieutenant-governor of the state, six of the senators, and 11 clergymen. The faculty consists of a president, nine professors, and six tutors. The course, as at Harvard university, extends through four years. 'In Yale college,' says Mr Duncan, 'the advantages of the English and the Scottish systems of education seem to be in a great measure combined. The scope for original discussion and elegance of illustration which lecturing affords, is connected with the more laborious and effective discipline of tutors and examination. The whole of the clases are subjected to a rigorous scrutiny twice in each year. The stimulating system of prizes is partially in use. Bishop Berkeley established a prize fund, which yields annually 150 dollars; this is given in premiums of 50 dollars (11*l.* 5*s.*) each, to the students in different classes who pass the best examination in Latin and Greek. A few others of inferior amount are given for specimens of Latin and English composition, and for public declamation. These premiums are bestowed privately. The medical school which is in connection with Yale college, is of recent institution, but already bears an honourable reputation. The expense of education is rather less than at Harvard. I believe that few students can keep their expenditure much under 100*l.* a-year; and some of the more extravagant frequently expend twice as much. The president has an annual salary of about 450*l.* sterling; the professors from 270*l.* to 340*l.* In the medical department, the professor receives no other salary than the fees of the students, with the exception of one, who has an annual stipend of 90*l.* The professors of chemistry and mathematics, besides their salaries as academical professors, have half of the fees received from medical students and strangers who attend their classes.' The college-library contains nearly 8000 volumes. Connected with the philosophical department is a most commodious and well-furnished laboratory. The cabinet of minerals is by far the finest in America, and there are few in Europe that surpass it. In November, 1820, the number of students in Yale college was, resident graduates, 31; academical students, 319; medical students, 62; total, 412."—*Modern Traveller.*

question is not, 'What is his creed?'—but, 'What is his conduct?' Jews have all the privileges of Christians; Episcopalians, Presbyterians, and Independents, meet on common ground. No religious test is required to qualify for public office, except in some cases a mere verbal assent to the truth of the Christian religion; and in every court throughout the country it is optional whether you give your affirmation or your oath." It would be a very erroneous conclusion, were it inferred from this, as has been attempted by some, that the people of the United States are inattentive to religious observances. The fact is directly the reverse; in no other country are there so many churches in proportion to the numbers of the population, and in no other country are the working clergy so well paid as in the United States. Religion, although deriving no pillars from the state, is possessed of 8,000 places of public worship, and guarded by 5000 ecclesiastics; "intolerance is disarmed by being let alone," and the various Christian sects agree to differ. There are no rich livings, indeed, but, on the other hand, none of the ministers of religion are subjected to the miserable penury on which many of their brethren in the gospel, though ministers of an established religion, are allowed to starve in our own country. There are, in certain parts of the Union, lands which were given to the Episcopal church anterior to the revolution, and which in these particular cases render any further contribution unnecessary; but the clergy of the United States are almost uniformly supported by assessments, voluntary so far as the law is concerned, but which public opinion renders in no small degree obligatory. In the same manner the expense of erecting churches is provided. Society throughout America expects every man to attach himself to some church, though it leaves him the option of his faith. Congregations of every denomination are recognized so far as to be made corporations, or bodies politic, for holding property and managing their other temporal concerns.

The Americans are distributed into all the different sects which are to be found on this side of the Atlantic. The most numerous are Baptists, Methodists, Congregationalists or Independents, and Presbyterians. The following summary view of the religious denominations in the United States is compiled chiefly from the Quarterly Journal (1830,) of the American Education Society:—

1. *Orthodox Congregationalists*—Principally within the six North-eastern or New England states; in each of which there is a General Conference, Association, or Convention. Associations or Conferences, 66; ministers, 800; vacant churches, 250; communicants, 120,000. [Documents not complete.]

2. *Presbyterians*—In the Middle, Southern, and Western States. Synods, 19; presbyteries, 92; ordained ministers, 1,392; licentiates, 205; churches, 2,070; communicants, 162,816.

3. *Reformed Dutch Church*—Principally in the states of New York, New Jersey, and Pennsylvania. Synods, 2; classes, 16; pastors, 150; licentiates, 7; churches, 185; vacant, 44; communicants, 11,713.

4. *Protestant Episcopal Church*—Principally in the Atlantic states, but scattered through most of the others. Dioceses, 18; bishops, 10; ministers, 528.

5. *German Reformed Church*—Principally in the Middle states and Ohio. Synods, 2; classes, 8; ordained ministers, 120; candidates, 10; congregations, 500. [Documents deficient.]

6. *Evangelical Lutheran Church*—Principally in the Middle states. In 1828, about 200 ministers, and 800 congregations.

7. *Methodist Episcopal Church*—In all the states. Bishops, 4; conferences, 17; travelling preachers, 1,697, superannuated, 120; members, 447,743.

8. *Calvinistic Baptists*—In all the states. Associations, 224; churches, 4,285; ministers, 2,857, communicants, 292,862. [Documents not all of 1829.]

9. *Seventh-Day Baptists*—Principally in Rhode Island. Ministers, 30; communicants, 3,000. [Estimated.]

10. *Six-Principle Baptists*—Principally in Rhode Island and New York. In 1828, about 25 churches, and 1,700 members.

11. *Mennonites*—In 1824, ministers, 250; members, 30,000.

12. *Tunkers*—Principally in the western states. Churches, 40; communicants, 3,000. [Estimated.]

13. *Free-Will Baptists*—Principally in New England. Ministers, 300; churches, 370; communicants, 16,000. [Estimated.]

14. *Christian Society*—In most of the states. Ministers, 300; members, 30,000. [Estimated.]

15. *Emancipators*—Principally in Kentucky. Ministers, 10; communicants, 400. [Estimated.]

16. *Free-Communion Baptists*—In the state of New York. Ministers, 30; communicants, 3,500; [Estimated.]

17. *United Brethren*—Principally in Pennsylvania and North Carolina. In 1828, ministers, 23; congregations, 23; communicants, 2,000; members, 6,000.

18. *Quakers or Friends*—Principally in the Atlantic states. Members, 150,000; of whom 56,026 are Hicksites, 28,904 orthodox, and the others not known.

19. *Cumberland Presbyterians*—In the states bordering on the Mississippi river. Synod, 1; several presbyteries; increase last year about 3,500.

20. *Unitarians*—Principally in Massachusetts. Churches, 160. [Estimated.]

21. *Swedenborgians*—Principally in the Eastern and Middle states. Ministers, 29; regular societies in 28 towns.

22. *Shakers*—Principally in New England and New York. Societies, 16; preachers, 45; members, 5,400.

23. *Universalists*—Principally in the Eastern and Middle states. Preachers, 150; societies, 300. [Estimated.]

24. *Roman Catholics*—Archbishop, 1; Bishops, 10 or 12; numbers estimated at 500,000.

A zeal for the extension of the name and interest of the Saviour has been lately widely diffused among Christians of all denominations in the United States. Bible, missionary, and religious tract societies, have started up in every quarter. The whole of the Bible societies in the United States are united into one society, denominated the American Bible Society, professing to have in view the same grand object with those formed in different parts of Europe, and to correspond and co-operate with them in prosecuting the same design. From their Reports, it appears that there is still a deplorable want of bibles in the Southern and Western states of the Union. The efforts of the American missionary society are chiefly directed to Christianize the Indians; but some missionaries have been lately sent to co-operate with those from Europe in the Indian archipelago, and the numerous islands of the South sea.

CHAP. VI.—GOVERNMENT.

Federal Constitution.] The United States of North America are a political aggregation of 27 independent but confederated republics, each of which has a particular constitution of its own, and a distinct and separately organized government. The form of constitution adopted by the particular states is nearly the same; but it is proper here to premise, that the colonies now forming the United States were settled at different times, and by different classes of emigrants, and that the degree of power retained by the crown over them was extremely various. In some instances, the governor and council were named in England; in others, the governor alone was appointed there; while in the case of Rhode Island and Connecticut, the people enjoyed by charter so uncontrolled an independence in the regulations of their local concerns, that the revolution did not render necessary the slightest alteration in the forms of internal administration. One of these colonies, indeed, retains even to this day the charter of Charles II., as its system of state-government; another only parted with the royal charter for a constitution of its own making in 1818. With distinct legislatures, and with such discrepancies in the sources from which their respective executives derived their authority, it need hardly be observed, that each colony was wholly independent of every other. The

idea of a congress was first partially acted on in 1722; and one composed of deputies from all the eastern and middle colonies was held at Albany in 1754 with the approbation of the mother-country, for the purpose of considering the best means of defending the provinces against the French, then rulers of Canada, and their Indian allies. On this occasion a plan was proposed of a federal government; but the scheme was not relished either by the ministry at home or by the colonies, and was never put into execution. The first congress held on account of the alleged grievances sustained from England, and which met at New York in 1765, maintained that the power of taxation resided solely in the colonial legislatures. The language adopted at the meeting of 1774 was still more decided; but it was in the ensuing year that the congress assembled, which, on the 4th of July, 1776, declared the independence of the United States. On the separation from England, the little power which had been either claimed or exercised by the British government, was at once assumed by the individual states. The authority of congress was at first wholly of a recommendatory character, and rested on the general conviction of the necessity of co-operation, rather than on any defined principles. But the importance of some understood compact was early felt; and even before the declaration of independence was formally made, a committee was appointed to prepare an act of confederation, which having been agreed to in congress, and proposed to the several states for their ratification in 1777, was generally assented to by them in the course of the ensuing year. This act was essentially between 13 independent powers for specific purposes. It was indeed resolved that the union of the states was to be perpetual; but it was also declared that "each state retains its sovereignty, freedom, and independence, and every power, jurisdiction, and right, which is not by this confederation expressly delegated to the United States in Congress assembled." The idea of an association of equal sovereignties was so fully persevered in, that each colony, without regard to its extent or population, had but one vote in the congress: thus recognizing a very pernicious principle, and giving, it might be, to the opinions of an actual minority, a power as great as to those of the majority. The principal object of the league was to act with energy for the common defence; and for this purpose a general treasury was established for the payment of the troops, and such national matters. Congress had no power to raise taxes; even the land-forces for the common defence were raised by the several states, the quotas only being fixed by congress. The limitations of the powers of the superintending authority occasioned a degree of inaction which was very far from according with the pressing nature of the demands made by the general or the local governments; and when fear from abroad had ceased, the whole confederacy was found inefficient for the promotion of the general interests of the several states. Without adverting to the expedients which were, from time to time, suggested to correct the most conspicuous difficulties of the system, we shall here introduce entire the constitution which was adopted in 1787, and which was carried into effect on the 4th of March, 1789:

"We, the people of the United States, in order to form a more perfect union, establish justice, ensure domestic tranquillity, provide for the common defence, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this constitution for the United States of America.

Article I.—*Sect.* 1. All legislative powers herein granted shall be vested in a congress of the United States, which shall consist of a senate, and house of representatives.

Sect. 2. The house of representatives shall be composed of members chosen every second year by the

people of the several states, and the electors in each state shall have the qualifications requisite for electors of the most numerous branch of the state of the legislature.

No person shall be a representive who shall not have attained to the age of twenty-five years, and been seven years a citizen of the United States, and who shall not, when elected, be an inhabitant of that state in which he shall be chosen.

Representatives and direct taxes shall be apportioned among the several states which may be included within this union, according to their respective numbers, which shall be determined by adding to the whole number of free persons, including those bound to service for a term of years, and excluding Indians not taxed, three-fifths of all other persons. The actual enumeration shall be made within three years after the first meeting of the congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct. The number of representatives shall not exceed one for every thirty thousand, but each state shall have at least one representative; and until such enumeration shall be made, the state of New Hampshire shall be entitled to choose three, Massachusetts eight, Rhode Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.*

When vacancies happen in the representation from any state, the executive authority thereof shall issue writs of election to fill such vacancies.

The house of representatives shall choose their speaker and other officers; and shall have the sole power of impeachment.

Sect. 3. The senate of the United States shall be composed of two senators from each state, chosen by the legislature thereof, for six years; and each senator shall have one vote.

Immediately after they shall be assembled in consequence of the first election, they shall be divided as equally as may be into three classes. The seats of the senators of the first class shall be vacated at the expiration of the second year; of the second class at the expiration of the fourth year; and of the third class at the expiration of the sixth year, so that one-third may be chosen every second year; and if vacancies happen by resignation, or otherwise, during the recess of the legislature of any state, the executive thereof may make temporary appointments until the next meeting of the legislature, which shall then fill such vacancies.

No person shall be a senator who shall not have attained to the age of thirty years, and been nine years a citizen of the United States, and who shall not, when elected, be an inhabitant of that state for which he shall be chosen.

The vice-president of the United States shall be president of the senate, but shall have no vote, unless they be equally divided.

The senate shall choose their other officers, and also a president *pro tempore*, in the absence of the vice-president, or when he shall exercise the office of president of the United States.

The senate shall have the sole power to try all impeachments. When sitting for that purpose, they shall be on oath or affirmation. When the president of the United States is tried, the chief justice shall preside: and no person shall be convicted without the concurrence of two-thirds of the members present.

Judgment in cases of impeachment shall not extend further than to removal from office, and disqualification to hold and enjoy any office of honour, trust, or profit, under the United States; but the party convicted shall nevertheless be liable and subject to indictment, trial, judgment, and punishment, according to law.

Sect. 4. The times, places, and manner of holding elections for senators and representatives, shall be prescribed in each state by the legislature thereof; but the congress may at any time by law make or alter such regulations, except as to the places of choosing senators.

The congress shall assemble at least once in every year, and such meeting shall be on the first Monday in December, unless they shall by law appoint a different day.

Sect. 5. Each house shall be the judge of the elections, returns, and qualifications, of its own members, and a majority of each shall constitute a quorum to do business; but a smaller number may adjourn from day to day, and may be authorized to compel the attendance of absent members, in such a manner, and under such penalties as each house may provide.

Each house may determine the rules of its proceedings, punish its members for disorderly behaviour, and with the concurrence of two-thirds, expel a member.

Each house shall keep a journal of its proceedings, and from time to time publish the same, excepting such parts as may in their judgment require secrecy; and the yeas and nays of the members of either house on any question shall, at the desire of one-fifth of those present, be entered on the journal.

Neither house, during the session of congress, shall, without the consent of the other, adjourn for more than three days, nor to any other place than that in which the two houses shall be sitting.

Sect. 6. The senators and representatives shall receive a compensation for their services, to be ascertained by law, and paid out of the treasury of the United States.† They shall, in all cases, except

* The number of representatives sent to Congress has increased with the gradual increase of population in the old states, and the accession of new states: in 1789, they were sixty-five; 1791, one hundred and seven; 1803, one hundred and thirty-five; 1813, one hundred and eighty-two; in 1823, two hundred and sixteen; and in 1828, two hundred and sixty-one.

† The same poverty which once drove our poorer burghs to beg off the expense of members, seem to be felt in some quarters of the United States at this day. In the session of 1825, it was calculated that 168 towns were not represented.

treason, felony, and breach of peace, be privileged from arrest during their attendance at the session of their respective houses, and in going to and returning from the same; and for any speech or debate in either house, they shall not be questioned in any other place.

No senator or representative shall, during the time for which he was elected, be appointed to any civil office under the United States, which shall have been created, or the emoluments whereof shall have been increased, during such time; and no person holding any office under the United States shall be a member of either house during his continuance in office.

Sect. 7. All bills for raising revenue shall originate in the house of representatives; but the senate may propose or concur with amendments as on other bills.

Every bill which shall have passed the house of representatives and the senate, shall, before it becomes a law, be presented to the president of the United States; if he approve, he shall sign it, but if not he shall return it, with his objections, to that house in which it shall have originated, who shall enter the objections at large on their journal, and proceed to reconsider it. If after such reconsideration two-thirds of that house shall agree to pass the bill, it shall be sent, together with the objections, to the other house, by which it shall likewise be reconsidered, and if approved by two-thirds of that house, it shall become a law. But in all such cases the votes of both houses shall be determined by yeas and nays, and the names of the persons voting for and against the bill shall be entered on the journal of each house respectively. If any bill shall not be returned by the president within ten days (Sundays excepted) after it shall have been presented to him, the same shall be a law, in like manner as if he had signed it, unless the congress, by their adjournment, prevent its return, in which case it shall not be a law.

Every order, resolution, or vote, to which the concurrence of the senate and house of representatives may be necessary (except on a question of adjournment,) shall be presented to the president of the United States; and before the same shall take effect, shall be approved by him, or, being disapproved by him, shall be repassed by two-thirds of the senate and house of representatives, according to the rules and limitations prescribed in the case of a bill.

Sect. 8. The congress shall have power

To lay and collect taxes, duties, imposts, and excises; to pay the debts, and provide for the common defence and general welfare of the United States; but all duties, imposts, and excises, shall be uniform throughout the United States;

To borrow money on the credit of the United States;

To regulate commerce with foreign nations, and among the several states, and with the Indian tribes;

To establish a uniform rule of naturalization, and uniform laws on the subject of bankruptcies throughout the United States;

To coin money, regulate the value thereof, and of foreign coin, and fix the standard of weights and measures;

To provide for the punishment of counterfeiting the securities and current coin of the United States;

To establish post-offices and post-roads;

To promote the progress of science and useful arts, by securing, for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries;

To constitute tribunals inferior to the supreme court;

To define and punish piracies and felonies committed on the high seas, and offences against the law of nations;

To declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water;

To raise and support armies, but no appropriation of money to that use shall be for a longer term than two years;

To provide and maintain a navy;

To make rules for the government and regulation of the land and naval forces;

To provide for the calling forth the militia to execute the laws of the Union, suppress insurrections, and repel invasions;

To provide for organizing, arming, and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the states respectively the appointment of the officers, and the authority of training the militia according to the discipline prescribed by congress;

To exercise exclusive legislation in all cases whatsoever, over such district (not exceeding ten miles square) as may, by cession of particular states, and the acceptance of congress, become the seat of government of the United States, and to exercise like authority over all places purchased by the consent of the legislature of the state in which the same shall be, for the erection of forts, magazines, arsenals, dock-yards, and other needful buildings;—And,

To make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this constitution in the government of the United States, or in any department or officer hereof.

Sect. 9. The migration or importation of such persons as any of the states now existing shall think proper to admit, shall not be prohibited by the congress prior to the year one thousand eight hundred and eight; but a tax or duty may be imposed on such importation, not exceeding ten dollars for each person.

The privilege of the writ of habeas corpus shall not be suspended, unless when in cases of rebellion or invasion the public safety may require it.

No bill of attainder or ex-post facto law shall be passed.

No capitation, or other direct tax, shall be laid, unless in proportion to the census or enumeration herein before directed to be taken.

No tax or duty shall be laid on articles exported from any state.—No preference shall be given by any regulation of commerce or revenue, to the ports of one state over those of another: nor shall vessels bound to, or from one state, be obliged to enter, clear, or pay duties in another.

No money shall be drawn from the treasury, but in consequence of appropriations made by law; and a regular statement and account of the receipts and expenditure of all public money shall be published from time to time.

No title of nobility shall be granted by the United States:—And no person holding any office of profit or trust under them, shall, without the consent of the congress, accept of any present, emolument, office, or title, of any kind whatever, from any king, prince, or foreign state.

Sect. 10. No state shall enter into any treaty, alliance, or confederation; grant letters of marque and reprisal; coin money; emit bills of credit; make any thing but gold and silver coin a tender in payment of debts; pass any bill of attainder, ex-post facto law, or law impairing the obligation of contracts, or grant any title of nobility.

No state shall, without the consent of the congress, lay any imposts or duties on imports or exports except what may be absolutely necessary for executing its inspection laws; and the net produce of all duties and imposts, laid by any state on imports or exports, shall be for the use of the treasury of the United States; and all such laws shall be subject to the revision and control of the congress. No state shall, without the consent of the congress, lay any duty of tonnage, keep troops or ships of war in time of peace, enter into any agreement or compact with another state, or with a foreign power, or engage in war, unless actually invaded, or in such imminent danger as will not admit of delay.

ARTICLE II.—*Sect.* 1. The executive power shall be vested in a president, of the United States of America. He shall hold his office during the term of four years, and together with the vice-president, chosen for the same term, be elected as follows:—

Each state shall appoint, in such manner as the legislature thereof may direct, * a number of electors equal to the whole number of senators and representatives to which the state may be entitled in the congress; but no senator, or representative, or person holding any office of trust or profit under the United States, shall be appointed an elector.

The electors shall meet in their respective states, and vote by ballot for two persons, of whom one at least shall not be an inhabitant of the same state with themselves. And they shall make a list of all the

* Accordingly, the legislature may itself appoint the electors. According to the *district-system* the state is divided into districts, which altogether return as many electors as the state has members in congress. The names of one set of district electors are written upon one ticket, and of another upon another; and as a party intends to support one candidate or the other, he votes for these their respective nominees. The number of district-electors thus returned is then cast up for the state, if unanimous, they will constitute so many actual votes for the president; if they differ, the clear majority alone is counted. Of course no state will choose to persevere in a system that risks throwing away its political strength by its different districts knocking their heads against each other, when the absurdity of their self-sacrifice can be avoided by the simple method of a *general ticket*, by which the inhabitants of the state vote at once, each for as many electors as his state is entitled to return members. The majority thus obtained, though by a single ticket, carries up in behalf of the successful candidate the whole number of electors unbroken to the presidential poll. The following table from the *United States Gazette* (1826,) we presume, will not be unacceptable to our readers. It presents a distinct view of the *mode* of choosing the electors of president and vice-president in the several states of the Union, the *time* in which the election is held in each state, and the *number of electors* to which each is entitled.

States.	*Mode.*	*No. of Electors.*	*Time of Election.*
Maine,	district,	9	November 3d.
New Hampshire,	general ticket,	8	November 3d.
Massachusetts,	do.	13	November 3d.
Rhode Island,	do.	4	November 19th.
Connecticut,	do.	8	November 3d.
Vermont,	do.	7	November 11th.
New York,	district,	36	Nov. 3d, 4th, and 5th.
New Jersey,	general ticket,	8	Nov. 4th and 5th.
Pennsylvania,	do.	28	October 31st.
Delaware,	legislature,	3	By Legislature.
Maryland,	district,	11	November 10th
Virginia,	general ticket,	24	November 3d.
North Carolina,	do.	15	November 13th.
South Carolina,	legislature,	11	By Legislature.
Georgia,	general ticket,	9	November 3d.
Tennessee,	district,	11	Nov. 13th and 14th.
Kentucky,	general ticket,	14	November.
Ohio,	do.	16	October 31st.
Indiana.	do.	5	———
Illinois,	do.	3	November 3d.
Missouri,	do.	3	November 3d.
Louisiana,	district,	5	Nov. 3d, 4th, and 5th.
Mississippi,	general ticket,	3	———
Alabama,	do.	5	November 10th.
		Total 261	

From the foregoing statement, it will be seen that 17 states choose their electors by general ticket, five states by district and two states by the legislature.

persons voted for, and of the number of votes for each; which list they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the president of the senate. The president of the senate shall, in the presence of the senate and house of representatives, open all the certificates, and all the votes shall then be counted. The person having the greatest number of votes shall be the president, if such number be a majority of the whole number of electors appointed; and if there be more than one who have such majority, and have an equal number of votes, then the house of representatives shall immediately choose, by ballot, one of them for president; and if no person have a majority, then from the five highest on the list, the said house shall in like manner choose the president. But in choosing the president, the votes shall be taken by states, the representatives from each state having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary to a choice. In every case, after the choice of the president, the person having the greatest number of votes of the electors shall be the vice-president. But if there should remain two or more who have equal votes, the senate shall choose from them, by ballot, the vice-president.*

The congress may determine the time of choosing the electors, and the day on which they shall give their votes; which day shall be the same throughout the United States.

No person, except a natural born citizen, or a citizen of the United States at the time of the adoption of this constitution, shall be eligible to the office of president; neither shall any person be eligible to that office who shall not have attained to the age of thirty-five years, and been fourteen years a resident in the United States.

In case of the removal of the president from office, or of his death, resignation, or inability to discharge the powers and duties of the said office, the same shall devolve on the vice-president, and the congress may by law provide for the case of removal, death, resignation, or inability, both of the president and vice-president, declaring what officer shall then act as president, and such officer shall then act accordingly, until the disability be removed, or a president shall be elected.

The president shall, at stated times, receive for his services a compensation, which shall neither be increased nor diminished during the period for which he shall have been elected, and he shall not receive within that period any other emolument from the United States, or any of them.

Before he enter on the execution of his office, he shall take the following oath or affirmation:—

"I do solemnly swear (or affirm) that I will faithfully execute the office of president of the United States, and will, to the best of my ability, preserve, protect, and defend the constitution of the United States."

Sect. 2. The president shall be commander-in-chief of the army and navy of the United States, and of the militia of the several states: when called into the actual service of the United States, he may require the opinion in writing of the principal officer in each of the executive departments, upon any subject relating to the duties of their respective offices; and he shall have power to grant reprieves and pardons for offences against the United States, except in cases of impeachment.

He shall have power, by and with the advice and consent of the senate, to make treaties, provided two-thirds of the senators present concur: and he shall nominate, and by and with the advice and consent of the senate, shall appoint ambassadors, other public ministers and consuls, judges of the supreme court, and all other officers of the United States, whose appointments are not herein otherwise

* The necessity for an amendment of that part of the American constitution which regulates the election of President and Vice-President, is becoming daily more apparent. On this subject, the President Jackson has the following judicious observations in his message to congress, in 1830: "A provision which does not secure to the people a direct choice of their chief magistrate, but has a tendency to defeat their will, presented to my mind such an inconsistency with the general spirit of our institutions, that I was induced to suggest for your consideration the substitute which appeared to me at the same time the most likely to correct the evil and to meet the views of our constituents. The most mature reflection since has added strength to the belief that the best interests of our country require the speedy adoption of some plan calculated to effect this end. A contingency which sometimes places it in the power of a single member of the house of representatives to decide an election of so high and solemn a character, is unjust to the people, and becomes, when it occurs, a source of embarrassment to the individuals thus brought into power, and a cause of distrust of the representative body. Liable as the confederacy is, from its great extent, to parties founded on sectional interests, and to a corresponding multiplication of candidates for the presidency, the tendency of the constitutional reference to the house of representatives is, to devolve the election upon that body in almost every instance, and, whatever choice may then be made among the candidates thus presented to them, to swell the influence of particular interests to a degree inconsistent with the general good. The consequences of this feature of the constitution appear far more threatening to the peace and integrity of the Union, than any which I can conceive as likely to result from the simple legislative action of the federal government. It was a leading object with the framers of the constitution, to keep as separate as possible the action of the legislative and executive branches of the government. To secure this object, nothing is more essential than to preserve the former from the temptations of private interest, and therefore so to direct the patronage of the latter as not to permit such temptations to be offered. Experience abundantly demonstrates that every precaution in this respect is a valuable safeguard of liberty, and one which my reflections upon the tendencies of our system incline me to think should be made still stronger. It was for this reason, that in connexion with an amendment of the constitution, removing all intermediate agency in the choice of the President, I recommended some restrictions upon the re-elegibility of that officer, and upon the tenure of officers generally. The reason still exists, and I renew the recommendation, with an increased confidence that its adoption will strengthen those checks by which the constitution designed to secure the independence of each department of the government, and promote the healthful and equitable administration of all the trusts which it has created. The agent most likely to contravene this design of the constitution is the chief magistrate. In order, particularly, that his appointment may, as far as possible, be placed beyond the reach of any improper influences,—in order that he may approach the solemn responsibilities of the highest office in the gift of a free people uncommitted to any other course than the strict line of constitutional duty,—and that the securities for this independence may be rendered as the nature of power and the weakness of its possessor will admit,—I cannot too earnestly invite your attention to the propriety of promoting such an amendment of the constitution as will render him ineligible after one term of service.

provided for, and which shall be established by law. But the congress may by law vest the appointment of such inferior officers as they think proper, in the president alone, in the courts of law, or in the heads of departments.

The president shall have power to fill up all vacancies that may happen during the recess of the senate, by granting commissions, which shall expire at the end of their next session.

Sect. 3. He shall from time to time give to the congress information of the state of the Union, and recommend to their consideration such measures as he shall judge necessary and expedient; he may, on extraordinary occasions, convene both houses, or either of them; and, in case of disagreement between them, with respect to the time of adjournment, he may adjourn them to such time as he shall think proper; he shall receive ambassadors and other public ministers; he shall take care that the laws be faithfully executed, and shall commission all the officers of the United States.

Sect. 4. The president, vice-president, and all civil officers of the United States, shall be removed rom office on impeachment for, and conviction of, treason, bribery, or other high crimes and misdemeanours.

ARTICLE III.—*Sect.* 1. The judicial power of the United States shall be vested in one supreme court, and in such inferior courts as the congress may from time to time ordain and establish. The judges both of the supreme and inferior courts, shall hold their offices during good behaviour, and shall, at stated times, receive for their services a compensation, which shall not be diminished during their continuance in office.

Sect. 2. The judicial power shall extend to all cases, in law and equity, arising under this constitution, the laws of the United States, and treaties made, or which shall be made, under their authority; to all cases affecting ambassadors, other public ministers and consuls; to all cases of admiralty and maritime jurisdiction; to controversies to which the United States shall be a party; to controversies between two or more states, between a state and citizens of another state, between citizens of different states, between citizens of the same state claiming lands under grants of different states, and between a state, or the citizens thereof, and foreign states, citizens, or subjects.

In all cases affecting ambassadors, other public ministers and consuls, and those in which a state shall be party, the supreme court shall have original jurisdiction. In all the other cases before-mentioned, the supreme court shall have appellate jurisdiction both as to law and fact, with such exceptions, and under such regulations as the congress shall make.

The trial of all crimes, except in cases of impeachment, shall be by jury; and such trial shall be held in the state where the said crime shall have been committed; but when not committed within any state, the trial shall be at such place or places as the congress may by law have directed.

Sect. 3. Treason against the United States shall consist only in levying war against them, or in adhering to their enemies, giving them aid and comfort. No person shall be convicted of treason, unless on the testimony of two witnesses to the same overt act, or on confession in open court.

The congress shall have power to declare the punishment of treason; but no attainder of treason shall work corruption of blood, or forfeiture, except during the life of the person attainted.

ARTICLE IV.—*Sect.* 1. Full faith and credit shall be given in each state to the public acts, records, and judicial proceedings, of every other state. And the congress may by general laws prescribe the manner in which such acts, records, and proceedings, shall be proved, and the effect thereof.

Sect. 2. The citizens of each state shall be entitled to all privileges and immunities of citizens in the several states.

A person charged in any state with treason, felony, or other crime, who shall flee from justice, and be found in another state, shall, on demand of the executive authority of the state from which he fled, be delivered up, to be removed to the state having jurisdiction of the crime.

No person held to service or labour in one state, under the laws thereof, escaping into another, shall, in consequence of any law or regulation therein, be discharged from such service or labour, but shall be delivered up on claim of the party to whom such service or labour may be due.

Sect. 3. New states may be admitted by the congress into this Union, but no new state shall be formed or erected within the jurisdiction of any other state; nor any state be formed by the junction of two or more states, or parts of states, without the consent of the legislatures of the states concerned, as well as of the congress.

The congress shall have power to dispose of and make all needful rules and regulations respecting the territory or other property belonging to the United States; and nothing in this constitution shall be so construed as to prejudice any claims of the United States, or of any particular state.

Sect. 4. The United States shall guarantee to every state in this Union a republican form of government, and shall protect each of them against invasion; and on application of the legislature, or of the executive (when the legislature cannot be convened), against domestic violence.

ARTICLE V.—The congress, whenever two-thirds of both houses shall deem it necessary, shall propose amendments to this constitution; or, on the application of the legislatures of two-thirds of the several states shall call a convention for proposing amendments, which, in either case, shall be valid to all intents and purposes, as part of this constitution, when ratified by the legislature of three-fourths of the several states, or by conventions in three-fourths thereof, as the one or the other mode of ratification may be proposed by the congress: provided, that no amendment which may be made prior to the year 1808 shall in any manner affect the first and fourth clauses in the ninth section of the first article; and that no state, without its consent, shall be deprived of its equal suffrage in the senate.

ARTICLE VI.—All debts contracted, and engagements entered into, before the adoption of this constitution, shall be as valid against the United States under this constitution as under the confederation.

This constitution, and the laws of the United States which shall be made in pursuance thereof: and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land; and the judges in every state shall be bound thereby, any thing in the constitution or laws of any state to the contrary notwithstanding.

The senators and representatives before-mentioned, and the members of the several state legislatures, and all executive and judicial officers, both of the United States and of the several states, shall be bound by oath or affirmation to support this constitution; but no religious test shall ever be required as a qualification to any office or public trust under the United States.

ARTICLE VII.—The ratification of the conventions of nine states shall be sufficient for the establishment of this constitution between the states so ratifying the same.

Done in convention, by the unanimous consent of the states present, the seventeenth day of September, in the year of our Lord, One Thousand Seven Hundred and Eighty-seven, and of the Independence of the United States of America the Twelfth. In witness whereof, we have hereunto subscribed our names.

GEORGE WASHINGTON, President.

Signed also by all the Delegates which were present from twelve States.

WILLIAM JACKSON, Secretary.

When the various states signified their adoption of this constitution, they expressed a desire, in order to prevent abuses, to have further declaratory and restrictive clauses added. It was accordingly resolved, by the senate and house of representatives in congress assembled, that the following articles should be proposed to the legislatures of the several states, as amendments to the constitution of the United States; all or any of which articles, when ratified by three-fourths of the said legislatures, to be valid as part of the said constitution.

I. After the first enumeration required by the first article of the constitution, there shall be one representative for every thirty thousand, until the number shall amount to one hundred, after which the proportion shall be so regulated by congress, that there shall not be less than one hundred representatives, nor less than one representative for every forty thousand persons, until the number of representatives shall amount to two hundred, after which, the proportion shall be so regulated by congress that there shall not be less than two hundred representatives, nor more than one representative for every fifty thousand persons.

II. No law varying the compensation for the services of the senators and representatives shall take effect, until an election of representatives shall have intervened.

III. Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.

IV. A well regulated militia being necessary to the security of a free state, the right of the people to keep and bear arms shall not be infringed.

V. No soldier shall, in time of peace, be quartered in any house without the consent of the owner, nor in any time of war, but in a manner to be prescribed by law.

VI. The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrant shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

VII. No person shall be held to answer for a capital or otherwise infamous crime, unless on a presentment or indictment of a grand jury, except in cases arising in the land or naval forces, or in the militia when in actual service, in time of war or public danger; nor shall be compelled, in any criminal case, to be a witness against himself, nor be deprived of life, liberty, or property, without the process of law; nor shall private property be taken for public use, without just compensation

VIII. In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the state and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process to have witnesses in his favour; and to have the assistance of counsel for his defence.

IX. In suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved; and no fact, tried by a jury, shall be otherwise re-examined in any court of the United States, than according to the rules of the common law.

X. Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

XI. The enumeration in the constitution of certain rights, shall not be construed to deny or disparage others retained by the people.

XII. The powers not delegated to the United States by the constitution, nor prohibited by it to the states, are reserved to the states respectively or to the people.

These articles were soon ratified by a sufficient number of the states to make them part of the constitution. Delaware rejected the first article, and New Hampshire, New Jersey, and Pennsylvania, the second. The great distinction which exists between the present system, and that to which it was substituted is, that the federal government, instead of being a confederation of the states, now acts, in those cases in which it possesses jurisdiction directly as individuals, without the intervention of any other authority, while, at the same time, the powers which are not transferred by the constitution to the general government, remain in the individual states as independent republics. Thus the American people are under a double government, each of which is independent of the other. If a subject fall within the cognizance of the state, the law respecting it must be passed by the local legislature, the judiciary authorities who interpret it are appointed under the sanction of the provincial constitution, as also the executive or ministerial officers who give effect to the decision. So, on the other hand, should the matter appertain to the general government, Congress provides the law in the case, the United States Judiciary construe it, and it is enforced by persons deriving their authority from the federal power. Piracy and murder might be adduced as familiar instances of this distinction: these crimes being cognizable by different jurisdictions, could in no part of the investigation come before the same tribunals. Many imperfections have, by politicians, been pointed out in this constitution. It wants, say they, a declaration of rights. The people are not secured in the benefits of even the common law. The number of representatives is by far too small for that of the people represented. The senate has too great preponderance in the constitution, and is in such a situation as to be daily acquiring more. The judiciary department is so constructed, that, by continued appeals, a process may be extended to an extraordinary length, and it possesses the anomalous power of annulling a law by declaring it unconstitutional. The president has no constitutional council; and will be naturally led to choose one for himself from the great officers of the state. Hence, too, arises the power of the senate, in the appointment of public officers; and a connexion between that branch of the legislature and the executive branch by far too close for the safety of the state. Treaties are declared to be supreme laws of the land, although, in negotiations concerning them, the opinion of the representatives be not asked. The general clause at the end of the enumerated powers of congress may be construed into a sense very dangerous to the liberty of the country. The power of congress is superior to that of the governments of the particular states, so that the declarations of rights made by these states are of no consequence. No provision is made for the preservation of the liberty of the press; trial by jury in civil causes is not secured; nor is the danger of standing armies in time of peace sufficiently obviated. Among the unavoidable evils of a double government are increased expense and a jealousy among the component parts, whether directed against the whole, or against each other: 'a sectional feeling,' as it is named, is called forth on all questions that suppose a divided and opposite interest.[5]

[5] "Congress is composed of so many states, varying in degrees of civilization, that an infinite diversity and contradiction in the views of the honourable members must be the necessary consequence when assembled in congress. The cunning literate Yankee, the adventurous New Yorker, the simple and honest Pennsylvanian, the aristocratic Virginian, the proud Carolinian and Georgian, have the same language with the unfeeling and presumptuous Kentuckian, but not the same views. Their manner of speaking, the course they pursue to attain their ends, are *toto cœlo* different. The first

Much has been said by the advocates for American wisdom, towards the extenuation of these blemishes; but, after all that their ingenuity has been able to suggest, they are obliged to confess, that many things exist in the constitution of the United States loudly requiring amendment. Doubtless, the attempt to adapt a frame of government to the purpose of securing freedom and political importance to so many states, containing so many people, was an exceedingly arduous undertaking; the "hardy attempt to solve out and cut the old problem of ruling all by all, is necessarily the most striking object of hope and contemplation that modern politics have ventured to propose;" and we cannot but admire the wisdom and penetration which, under these circumstances, adopted a government of which the blemishes are so few and the excellencies so many. At the same time, we cannot allow our American friends the whole merit of whatever is excellent in their form of government. Had they been left to the efforts of their own wisdom, many ages, it is probable, might have elapsed, before they could have discovered any thing approaching the perfection of their present constitution. The British government was the model of that adopted by the colonists, or bestowed upon them by their charters; and the wisdom of American legislation, at the revolution, attempted little more than to reject such parts of their old constitutions as did not please, and adopt others which their new circumstances made necessary. It is foolish to compare the members of the first congress with the legislators of the old world. They did little more than what might have been performed by ordinary understandings. They selected from a constitution which has long been admired, and of which they had long experienced the benefits, such parts as to them appeared most excellent, and such as fitted the situation in which the revolution had placed them. The American constitution and laws, it is true, display much wisdom, but it is the wisdom of men who reasoned and legislated before America was known to exist; and the people of the United States ought never to forget that they "actually passed from the feeble gristle into the bone and manhood of a hale political existence under English guidance and control."

State Governments.] The differences which exist between the general government and the state governments are unimportant. They consist each of an executive and legislative department; at the same time each state has prescribed the manner in which it pleases to have its internal administration regulated, as well as the extent of authority which it deems necessary to confide to its local rulers. The only restraint on the unlimited freedom

interest with every member of the congress is of course his own; the station of a representative is to be the stepping-stone to a permanent office. His second object is to promote the views of his party, the next, the interest of his county, then of the particular state to which he belongs, and finally that of the nation. A central point of union could hardly be expected amidst so many conflicting objects. The interests of the different states clash in such a manner as not to admit of a steady aim, such as is exhibited by the British Parliament. The latter consists of Whigs and Tories, whereas the congress of the United States is an assembly of brokers, sent by their respective states not to promote the welfare of the union, but of their own mean and sordid interests. One is expected to bring the turnpike through his county, another a canal, a third is to procure a light-house, a fourth an academy or a deaf and dumb asylum. These are the important affairs committed to the representatives: if they succeed, messenger-like, in the execution of their errands, they are called 'excellent fellows.' The administration, of course, avails itself of these opportunities, does all in its power to meet the wishes of its 'honourables' in matters of such vital interest, and is rewarded by corresponding good offices in return. The congress has precisely the appearance of an exchange, where every one manages his own business to the best of his understanding, without troubling himself much about the affairs of his neighbours, until his own are terminated."—*United States as they are.*

of the inhabitants to decide for themselves on this matter is to be found in the provision in the federal constitution, that the United States shall guarantee to every state a republican form of government. But though there is no concurrence in the particular details of the systems established by the several states, they agree with one another, and with the constitution of the Union, in the general distribution of powers. The governors are elected more frequently than the president, in most cases annually or biennially. They are in some states chosen by the legislature, in others by the people at large. The lower house of the legislature, except in one instance, are elected annually, and the term of service of the councillors or senators differs from one to four years. The qualification of the electors are very various. In the eastern and middle states they are so small as to amount almost to universal suffrage, paupers and criminals being alone excluded. Voting by ballot very generally prevails, and is easily managed. The provincial judges are generally appointed during good behaviour, though in some cases only for a term of years. It is left to the state legislatures respectively to make what provision they please for the maintenance of religion. Two or three states oblige every individual to contribute to the support of the ministers of religion, but they leave it optional with him to select any church within the parish or district to which the tax shall be applied. One or two constitutions contemplate the admissibility of Protestants only to public offices; but with these exceptions nothing calculated to impose restraints in matters of divine worship is recognised in the several states composing the Union. A state is generally divided, for common objects of government and police, into *counties* which average 900 square miles, and into *townships* which average 90.

The growing discordances of 'the Great Republic' are cautiously and painfully alluded to by most American writers. Mr Bristed speaks thus on the subject: "The very facility of emigration into the western country, raises another very important question for the contemplation of the American statesman. The direct tendency of such emigration is to enable the western territory, in the course of a few years, to outnumber, both in the senate and in the House of Representatives, the Atlantic states; which being done, the Western States, as great inland nations, and erroneously considering that the commercial policy of the Atlantic sea-board is opposed to their agricultural interests, will be apt to sacrifice that commercial policy to their own mistaken views of territorial aggrandizement. Great as was once the weight of New England in the American councils, her influence of late has been borne down by the preponderance of the west. New England, including Massachusetts and Maine, New Hampshire, Vermont, Rhode Island, and Connecticut, covers only a surface of little more than sixty thousand square miles, and contains a population of about one million and a half; whereas, the western country already counts a greater number of states—as Ohio, Kentucky, Tennessee, Mississippi, Indiana, and Louisiana, which give it a preponderance in the senate of the United States;—in addition to which there is an immense extent of surplus territory, out of which new states without number may be carved in the lapse of a few years. Its population already reaches between two and three millions, which enables it to vote down New England in the House of Representatives; and it covers a surface of more than one million five hundred thousand square miles; that is to say, more than fifteen times as large as the British isles, England, Ireland, and Scotland, put together, and averages a fertile soil, admirably adapted to sustain a very full and nume-

rous population; a population abundantly sufficient to outvote not only the New England, but all the other Atlantic states, all the states that composed the old Union which converted America from a British colony into an independent empire. The commercial policy is necessary to the very existence of New England, whose depopulation must follow as an inevitable result from its destruction or restriction, and its tide of emigration augments the numbers and resources of that western country, which is inclined to strike a deathblow to the prosperity of the Atlantic sea-board. The tendency of all this, beyond a peradventure, is either to break up the Federal Union, and entail a perpetuity of anarchy and civil broils throughout the whole continent, or to crush the Atlantic states beneath the enormous hoofs of the western mammoth."

Constitution of Massachusetts.] In order that the reader may have an accurate idea of the respective constitutions adopted by the different states, we shall subjoin that of Massachusetts, the most populous of the northern states, and then mention in what respects the others differ.

Declaration of Rights.] All men are born free and equal, and have certain natural essential and unalienable rights; among which may be reckoned that of enjoying and defending their lives and liberties; that of acquiring and protecting property; and that of seeking safety and happiness. It is the right and duty of all men to worship the Supreme Being, in the way most agreeable to their consciences; and, while he disturbs not the public peace, no citizen shall be disturbed for his religious sentiments. To preserve good order, religion, and morality, the people have a right to delegate to their legislature the power of requiring townships, parishes, and other places, to set up and maintain, at their own expense, the public worship of God; and this power is accordingly delegated. The people, as it is also their right, empower the legislature to enjoin upon all their subjects a regular attendance upon this divine worship. At the same time, all religious societies have a right of choosing their public religious instructors, and contracting for their maintenance; and each individual may insist that the money contributed by him, for the support of religion, be given to those of his own persuasion, provided there be any whose instructions he attends; otherwise it shall be applied to the general support of religion in the district where he resides. All sects of Christianity are equally under the protection of law, and no legal subjection of one sect to another can ever be established.

The people possess every right and power of governing themselves, except such powers as, from time to time, may be delegated to the congress of the United States of America; to the people, therefore, every part of the legislature is accountable. No individual or society has any right to exclusive privileges, except such as arise from public services. These privileges are not transmissable to descendants; consequently no man can be born to any title or office. The people have a right to reform or change their government, when they conceive that their prosperity and happiness require it. They have a right, when they please, to call their public officers to private life, and to fill up vacant places at their own discretion. All elections must be free, and every inhabitant *duly qualified* has an equal right to vote.

Every individual is bound to support that government by which he is protected, and to render to it his personal services when required; but no part of his property can, on this account, be taken from him, unless by his own consent, granted by his representatives in the legislature. Every individual should, in the law, find a ready redress for such wrongs as he may have sustained. No subject can be obliged to answer for any offence, till the same has been fully described to him; none can be compelled to furnish evidence against himself, but every one has a right to produce every favourable evidence; to meet the witnesses against him face to face; and to be fully heard in his own defence, or by his counsel chosen by himself; and no punishment or penalty can be inflicted, but by his peers, or the law of the land. No capital or infamous punishment can be inflicted without trial by jury, except in the government of the army and navy.

In criminal prosecutions, the facts must be verified in the neighbourhood where they happen. No warrant can be issued for the seizure of any person, or to search any part of his property, till the foundation for it be previously supported by oath or affirmation. In all controversies relating to property, the parties have a right to trial by jury.

The liberty of the press is never to be restrained. The people have a right to bear arms for the common defence: and armies in time of peace are not to be maintained, without consent of the legislature. The military must always be in complete subordination to civil authority. The people have a right to require of the legislature a constant observance of the rules of piety and justice, and the fundamental principles of the constitution. They have a right to consult, in an orderly manner, on the public good; to give instructions to their representatives; and to present to the legislature addresses and petitions. The power of suspending laws can never be exercised by the legislature. Liberty of speech is allowed in the house of legislature. The legislature must frequently assemble to consult on the common good. No tax nor duties can be levied without the consent of the people or their representatives. No law can be made with a retrospective force. No subject can, by the legislature, be de-

clared guilty of felony or treason. Excessive bail must never be exacted, nor uncommon or cruel punishments inflicted.

In time of peace no soldier can be quartered in any house without the consent of the owner, or in time of war except in the manner prescribed by the legislature. No person can be subjected to martial law, except such as are actually employed in the army or navy. The judges of the supreme judicial court hold their places as long as they behave themselves well. The legislative, judicial, and executive departments of government must always be completely separate: none of them can exercise the functions of the others.

The General Court.] The department of legislation consists of two branches, a senate and a house of representatives, each of which has a negative on the other. The legislative body assembles on the last Wednesday of May annually, is dissolved on the day next preceding the said last Wednesday in May, and is styled the General Court of Massachusetts.

No bill of the house of senate, or representatives, becomes a law, till it has been laid before the governor for his revisal. His approbation is signified by signing the bill. If his approbation be refused, the bill, with his reasons of refusal, are remitted to that house where it originated. It is then reconsidered by both houses, and, if it meet the approbation of two-thirds of both houses, it passes into a law, notwithstanding the governor's refusal. If the governor return not a bill within five days after he has received it, he is understood to have given his assent, and it passes into a law. The general court has power to erect different kinds of courts, with authority to determine all kinds of causes, and to administer oaths, or receive affirmations. It is likewise authorized to make such laws as may appear beneficial to the commonwealth, without being contradictory to the spirit of its constitution. It has the appointment of such civil and military officers as are not expressly excepted by the frame of government. It limits their several functions, and provides for the proportional assessment of the subjects, and the duties to be imposed upon merchandise, for financial purposes. For the purpose of legal assessments, a valuation of the property of the subjects of the commonwealth, is, by the authority of the general court, to be made, at least, once in ten years.

The Senate.] The Freeholders of the commonwealth annually elect 40 persons, to be counsellors and senators for the year ensuing their election. The general court assigns the number to be elected, and divides the country into districts for that purpose; directing themselves by the amount of public taxes paid by each district: under this limitation, that the number of districts is never to be less than 13, nor any district so large as to entitle it to elect more than 6 senators.

The senate is the first branch of the legislature, and the members are chosen annually, on the first Monday in April. Every male inhabitant, of 21 years of age and upwards, possessing a freehold estate, within the commonwealth, of the annual income of L.3; or any estate of the value of L.60, has a vote in the election of the senators for the district in which he lives. The governor and five of the council for the time being, are appointed to give the new elected senators timely notice, that they may take their seats on the last Wednesday of May. The senate is the final judge of the elections, returns, and qualifications of its own members. No person is capable of being elected as a senator, who is not possessed of a freehold, within the commonwealth, of the value of L.300 at least; a personal estate to the value of L.600 at least; or of both to the amount of the same sum; and who has not been an inhabitant of the commonwealth five years immediately preceding his election; and who is not an inhabitant of the district for which he is chosen.

The senate may adjourn itself for a space not exceeding two days at a time. It chooses its own president; appoints its own officers; and determines its own rules of proceeding. It is authorized to determine all impeachments made by the house of representatives, against any officer of the commonwealth. Its judgment extends only to removal from office, and disqualification to hold any place under the commonwealth: but the parties so convicted, may be afterwards tried by the laws of the land: 16 members constitute a quorum.

House of Representatives.] In order to provide for an equal representation of the citizens, every corporate town, containing 150 rateable poles, elects one representative, and one for every 225 rateable poles above that number. A town, properly qualified, may be fined by the house of representatives for neglecting to elect a representative; the expenses of the representatives travelling once to the assembly and home during each session, are defrayed from the public treasury.

No person can be chosen as a representative, who is not possessed of a freehold of the value of L.100 within the town he shall be chosen to represent; or any rateable estate to the value of L.200; and who has not been an inhabitant of the town for which he is elected, at least, one year immediately preceding his election. Every male 21 years of age, who has resided in any town for one year immediately preceding the time of election, and who has a freehold of the value of L.3 annually, or any estate of the value of L.60, has a right to vote for the representative of that town.

The house of representatives is the grand inquest of the commonwealth. Impeachments made by them, are tried by the senate. All money bills must originate in the house of representatives; but the senate may propose alterations as in other bills. The members of this house can adjourn themselves for a period not exceeding two days at a time. Sixty members form a quorum. They are judges of the election of their members. No member can be held to bail on mesne process during his attendance on the general assembly. Both the house of representatives and the senate have the power of imprisoning, for a period not exceeding thirty days, any subject, not a member, who infringes any of their privileges.

Governor.] The supreme executive magistrate is styled 'His Excellency the Governor of the Commonwealth of Massachusetts.' He is chosen annually: must have been an inhabitant of the common-

wealth during the seven years immediately preceding his election; and must be possessed of a freehold within the commonwealth, to the value of L.1000. The same persons who are qualified to vote for senators or representatives, are likewise qualified to vote for the governor.

The governor, when he chooses, assembles the councillors of the commonwealth; and he, with any five of the councillors, are authorized to manage such part of the business of the commonwealth as, according to the constitution, falls to their share. With advice of counsel, he can adjourn or prorogue the general assembly to any time the two houses shall require; and, during the recess of court, he can prorogue it, from time to time, for a period not exceeding 90 days in one recess. He can likewise assemble it when the affairs of the commonwealth seem to demand its meeting; and in case of an infectious distemper prevailing, he can cause it to assemble at some place different from that in which it generally meets.

He is commander-in-chief of all the forces of the commonwealth, and can pardon offences, after conviction, though not before it. With advice of his council, he nominates all judicial officers, the attorney-general, solicitor-general, sheriffs, coroners, and registers of probate.

Captains and subalterns in the militia are elected by such of the train-band and alarm-list of their respective companies as are of 21 years of age and upwards. Field-officers are elected by the captains and subalterns of their respective regiments. Brigadiers are elected by the field-officers of their respective brigades. Major-generals are appointed by the senate and house of representatives; each having a negative upon the other. Commanding officers of regiments appoint their adjutants and quarter-masters; the brigadiers, their brigade-majors; and the major-generals their aids; the adjutant-general is appointed by the governor. He appoints also such officers as are furnished by the commonwealth to the continental army, with the officers of forts and garrisons; and from him every officer receives his commission.

No money can be issued from the treasury without a warrant from the governor, with advice of the council. All public boards, and superintending officers of magazines and stores, are obliged to deliver, at least once in every three months, an account of whatever is under their charge.

Lieutenant-Governor.] A lieutenant-governor, with the title of His Honour, is annually elected: his qualifications, with regard to religion, property, and residence, must be the same as those of the governor. In the absence of the governor he is president of the council, but has then no vote: when the governor is present he is a member of the council; when the chair of the governor becomes vacant, by his death, or absence from the commonwealth, his full powers then descend to the lieutenant-governor.

Council.] The council, for advising the governor in the executive part of the administration, consists of nine persons besides the lieutenant-governor: five of whom make a quorum. These councillors are chosen by the senate and representatives jointly, from their own number. They rank next after the lieutenant-governor: more than two of them cannot be chosen from any one district. Their resolutions are registered; and may, at any time, be called for by either house of legislature. In case of the death or absence of both governor and lieutenant-governor, their powers devolve to the council.

Secretary, Treasurer, Commissary, &c.] The secretary, treasurer, receiver-general, commissary-general, notaries public, and naval officers, are chosen annually, by the joint ballot of the senators and representatives. No man can be chosen as a treasurer and receiver-general for more than five years successively. The secretary keeps the records of the commonwealth: he appoints his deputies, but is accountable for their conduct. He or his deputies are obliged to attend the various branches of the legislature when required.

Judiciary Power.] Judicial officers hold their places during good behaviour. The governor, and both houses of legislature, may require the opinions of the judges of the supreme judicial court when they shall think it necessary. The commission of a justice of the peace continues only seven years.

Delegates to Congress.] The delegates to congress are chosen in June, annually, *by the joint ballot of the senators and representatives.* They are commissioned by the governor, and may be recalled within the year.

University of Cambridge.] To the university are confirmed all those immunities and privileges which have, at any time, been conferred on it. The governor, lieutenant-governor, council, and senate, together with the president of Harvard college, and the ministers of the congregational churches in the towns of Cambridge, Waterton, Charleston, Boston, Roxbury, and Dorchester, are overseers of the university.

Disqualifications for Office.] No officer of the commonwealth can hold any other place, or receive any salary from any other government. No person can hold two of the following offices, judge of probate, sheriff, register of probate, or register of deeds; and more than two of any other offices, military offices excepted, cannot be held by one person. No person, holding the office of judge of the supreme judicial court, secretary, attorney-general, solicitor-general, treasurer, or receiver-general, judge of probate, commissary-general, president, professor or instructor of Harvard College, sheriff, clerk of the house of representatives, register of probate, register of deeds, clerk of the supreme judicial court, clerk of the inferior court of common pleas, officer of the customs, or naval officer, can, at the same time, have a seat in the senate, or house of representatives. No person who has been convicted of bribery or corruption, can ever hold a place under the government.

The sums of money mentioned as constituting legal qualifications for certain offices, are reckoned in the proportion of six shillings and eight-pence for an ounce of silver. The qualifying sums may be altered as the circumstances of the commonwealth require.

Habeas Corpus, &c.] The writ of habeas corpus is enjoyed in this commonwealth in the freest man-

ner; and it cannot be suspended but on the most urgent occasions, and then only for a limited time not exceeding 12 months.

The enacting style, in passing all acts, statutes, and laws, is, "Be it enacted by the senate and house of representatives in general court assembled, and by the authority of the same."

The government of the province of *Maine* is exactly the same as that of Massachusetts.

The state of *Vermont* has no senate. The representatives are chosen by the freemen of the state, 21 years of age, and who have resided one whole year next before the election. Every representative, before he takes his seat, must declare his belief in one God,—in future rewards and punishments, and in the divinity of the Old and New Testaments, and must profess the Protestant religion. In all other respects the government of Vermont resembles that of Massachusetts.

The state of *New Hampshire* has adopted the constitution of Massachusetts, except that here the governor presides in the senate; whereas, in Massachusetts, the senate elects its own president.

The constitution of *Rhode Island* is founded on the charter granted by king Charles II. in the fourteenth year of his reign; and the frame of government was not essentially altered by the revolution. The legislature of the state consists of two branches; a senate or upper house, composed of ten members called in the charter *assistants;* and a house of representatives, composed of deputies from the several towns. The members of the legislature are chosen twice a-year; and there are two sessions of this body annually, viz. on the first Wednesday in May, and the last Wednesday in October. The supreme executive power is vested in a governor, or, in his absence, in the deputy-governor, who are chosen annually in May by the suffrages of the people. The governor presides in the upper house, but has only a single voice in enacting laws. There is one supreme judicial court, composed of five judges, whose jurisdiction extends over the whole state, and who hold two courts annually in each county. In each county, there is an inferior court of common pleas and general sessions of the peace, held twice a-year for the trial of causes not capital, arising within the county, from which an appeal lies to the supreme court. The justices of the peace, as in other states, have cognizance of small causes; and since the revolution, their powers have been enlarged to an uncommon, if not to a dangerous extent.

The constitution of *Connecticut* is not materially different from that founded on the charter granted by Charles II. in 1662. It almost exactly resembles that of Massachusetts, except that the qualification for voting is rather lower, being the possession of a freehold estate to the value of forty shillings per annum, or a taxable personal estate, in the list, certified by the select men of the town, of forty pounds sterling.

The constitution of the state of *New York* also nearly resembles that of Massachusetts. The members of the senate are chosen by the freeholders of the state only, who possess a freehold of the value of *L.*100 at least, free of all debt. The representatives in the house of assembly are chosen by such male inhabitants as are of full age, and possess a freehold of *L.*20 value in the county where he is to vote, and by householders who rent a tenement of forty shillings a-year, and who have been rated for, and actually paid county and state taxes. The freedom of the cities of New York and Albany, also confer the right of voting for representatives in assembly.

The constitution of *New Jersey* nearly resembles that of Massachusetts

The senators, or members of the legislative council, must be possessed of a real and personal estate, within the county which they represent, to the value of *L.*1000: and must have been freeholders and inhabitants of the county for at least one year previous to the election, and must profess the Christian and Protestant religion. The members of the house of assembly must possess real and personal property in the county to the amount of *L.*500, and be otherwise qualified as above. Every inhabitant of the state who has resided one year in the county, and who is possessed of real and personal property therein to the amount of *L.*50, is entitled to vote at elections. The governor is chosen annually by the legislative council and assembly jointly.

The legislative power of *Pennsylvania* is vested in a general assembly, consisting of a senate and house of representatives. The representatives are chosen annually, in the month of October. To be qualified for this office, a person must be twenty-one years of age; he must have been an inhabitant of the state for three years, and an inhabitant of the city or county he is to represent one year preceding his election. Once in seven years an enumeration of taxable inhabitants is to be made, and the number of representatives apportioned to the various counties accordingly. The number of representatives is never to be less than 60, nor greater than 100. The senators are chosen once in four years, in the same manner as representatives. They are likewise apportioned to the districts according to the number of taxable inhabitants: and their number cannot be less than one-fourth, nor greater than one-third of that of the representatives. They are elected by districts appointed by the legislature: but no district can be entitled to vote for more than four senators. To be entitled to fill this office, a person must be 25 years of age, must have resided four years in the state, and one year, immediately preceding his election, in the district for which he is to be elected. One-fourth of the senators go out of office every year, and their places are supplied by new members. The general assembly meets in December. Each house chooses its speaker and other officers, is judge of the qualifications of its members, determines the rules of its proceedings, and publishes a weekly journal of those proceedings. Neither house can, without the consent of the other, adjourn itself for a period exceeding three days. The members of both houses receive a compensation for their services. During their attendance at their sessions, they are free from arrest, except in cases of treason, felony, and breach of surety of the peace; and they have freedom of speech in their respective houses. No member of either house can hold any other civil office. All bills for raising revenue must originate in the house of representatives, but the senate may propose amendments. When a bill has passed both houses, it is presented to the governor: if he approves he signs it: if not, he returns it, with his objections, to the house where it originated: and if, after re-consideration, it be approved by two-thirds of both houses, it becomes a law. If the governor return not a bill within ten days after receiving it, he is considered as having given it his assent. The supreme executive power is vested in the governor, who is chosen by such of the citizens as vote for representatives; he holds his office for three years, but is incapable of holding it more than nine years in any term of twelve years. He must be at least 30 years of age, and must have been a citizen of the state seven years before his election. No person holding any office under the United States can be governor. He receives a salary, but this salary can neither be augmented nor diminished during the period for

which he is elected. He is commander-in-chief of the army, navy, and militia of the state; unless when they are called into the actual service of the United States. He appoints all officers, whose appointments are not otherwise provided for by the constitution. He can remit fines, grant pardons and reprieves, except in cases of impeachment. He gives to the general assembly information concerning the state of the commonwealth, and recommends to their attention such measures as he judges expedient. He can, on extraordinary occasions, convene the general assembly; and can adjourn them, for any time not exceeding four months: and he has the care of seeing the laws faithfully executed. In case of any accidental vacancy, the speaker of the senate exercises the office of governor. A secretary is elected with the governor, and continues during the same time in office. Every freeman of the age of 21 years, who has resided in the state two years next before the election, and within that time paid a state or county tax, enjoys the right of an elector. At the same time, the sons of persons so qualified, between the age of 21 and 22 years, are entitled to vote, though they have paid no taxes. All elections are made by ballot.

Of the constitution of the state of *Delaware*, which was adopted in 1776, Morse gives the following abridgment:—" The legislature is divided into two distinct branches, which, together, are styled, 'The General Assembly of Delaware.' One branch, called the 'House of Assembly,' consists of seven representatives from each of the three counties, chosen annually by the freeholders. The other branch, called the 'Council,' consists of nine members, three for a county, who must be more than 25 years of age, chosen likewise by the freeholders. A rotation of members is established by displacing one member for a county at the end of every year. All money bills must originate in the house of assembly; but they may be altered, amended, or rejected, by the legislative council. A president or chief magistrate is chosen by the joint ballot of both houses, and continues in office three years; at the expiration of which period, he is ineligible for the three succeeding years. If his office become vacant during the recess of the legislature, or he be unable to attend the business, the speaker of the legislative council is vice-president for the time; and in his absence, the powers of the president devolve upon the speaker of the assembly. A privy council, consisting of four members, two from each house, chosen by ballot, is constituted to assist the chief magistrate in the administration of government. Every member, before taking his seat, must take the oath of allegiance, and subscribe a religious test, declaring his belief in God the Father, in Jesus Christ, and the Holy Ghost, and in the inspiration of the scriptures."

By the constitution of *Maryland*, it is declared, that all men have a right to enjoy liberty of conscience; that all denominations of Christians are equally entitled to protection; that the legislature may assess the state for the support of the Christian religion, but every individual may direct his proportion to be given to the sect which he shall think proper to maintain; and that a declaration of belief in the Christian religion is all the religious test to be required from those who fill any of the offices of state. It is declared, that the liberty of the press ought to be preserved; that no monopolies ought to be allowed; nor any title of nobility or hereditary honours granted. The legislature consists of two branches, a senate and house of delegates together, styled, "The General Assembly of Maryland." The delegates are chosen by all freemen, above the age of 21 years, who

have a freehold of 50 acres of land in the county, or £30 currency, and who have resided one year within the county. The persons to be chosen delegates must have resided at least one year in the county which they are to represent; must be above 21 years of age, and must have within the state to the value of £500 currency. The house of delegates chooses its own speaker, is judge of the elections and qualifications of its members; all money bills must here originate, and it can refuse assent to bills proposed by the other branches of the legislature. The same persons who are qualified to vote for delegates, are likewise entitled to vote for county delegates, who elect the senators. These county delegates, after having met, elect by ballot from their own body, or from the people at large, 15 senators, nine residing on the western, and six on the eastern shore. These senators must be 21 years of age, must have resided in the state at least three years preceding their election, and must have, in real and personal property, above the value of £1000 currency. The senate is judge of the qualifications of its members, can propose bills of every kind, except money bills, and has a dissenting voice with regard to all bills. The general assembly meets on the first Monday of November, and each house appoints its own officers. The governor is chosen by a ballot of both houses, taken in each house respectively. They, in the same manner, elect five persons, as council to the governor, and the delegates to congress; the former must be above 25 years of age, must have resided three years within the state, and must have a freehold estate above the value of £1000 currency; the latter must be above 21 years of age, must have resided five years within the state, and must have an estate equal in value to that of councillors. The senate and house of delegates may adjourn themselves. If they cannot agree concerning the day, it is appointed by the governor; but he has, in no other case, the power of adjournment. To be entitled to be elected governor, a person must be above 25 years of age, must have resided five years within the state, and must be possessed of real and personal property, within the state, to the value of £5000 currency, of which at least £1000 must be a freehold estate. The governor continues in office three years, and cannot be re-elected till he has been four years out of office. He has the direction of the sea and land forces of the state, but cannot command them in person, unless when advised to it by the council, and then only so long as they shall approve of it. He cannot hold any office of profit, besides that of governor; nor can a place of profit be held by any senator or delegate. No minister of religion can hold any civil office.

In *Virginia*, the executive powers are lodged in the hands of a governor, chosen annually, and incapable of acting more than three years in seven. He is assisted by a council of eight members. The judiciary powers are divided among several courts. Legislation is exercised by two houses of assembly, the one called the house of delegates, composed of two members from each county, chosen annually by the citizens possessing an estate for life in 100 acres of uninhabited land, or 25 acres with a house on it, or a house or lot in some town; the other called the senate, consisting of 42 members, chosen quadrennially by the same electors, who for this purpose are distributed into 24 districts. The concurrence of both houses is necessary to the passing of a law. They have the appointment of a governor and council, the judges of the superior courts, auditors, attorney-general, treasurer, register of the land-office, and delegates to congress.

In the states of *Kentucky* and *Ohio*, the representatives are chosen annually; the senators, once in four years. In these states, every free male inhabitant of 21 years of age, who has resided two years in the state, or one year in the county in which he is to vote, has a right to the elective franchise.

In *North Carolina*, the legislative authority is vested in a senate and house of commons. The senate consists of one representative for each county, chosen annually. The house of commons consists of two representatives for each county, and one for each of the towns, Edenton, Newbern, Wilmington, Salisbury, Hillsborough, and Halifax, likewise chosen annually. Taken together, they form what is called the general assembly. Each member of the senate must have resided one year within the county which he is to represent, before his election, and must possess a freehold of at least 300 acres. Each member of the house of commons must likewise have resided one year within the county he is to represent, and must possess a freehold of 100 acres. Senators are elected by all freemen, who have resided in any county within the state one year, who are 21 years of age, and possess a freehold of 50 acres. Members of the house of commons are elected by all freemen who have resided one year in any county within the state, who are 21 years of age, and have paid public taxes. Each house chooses its own speaker, judges of the qualifications of its members, prepare bills to be passed into laws, and, jointly, by ballot, they adjourn themselves to any future day or place. All bills are read thrice in each house. The general assembly appoints judges of the supreme courts of law and equity, judges of admiralty, and the attorney-general, who are commissioned by the governor, and hold their offices during good behaviour. The general assembly also appoints all officers of the militia and regular army of the state. It annually elects a governor, who is not elegible more than three years in six; he must be 30 years of age, must have resided five years within the state, and possess a household of the value of £1000. To assist the governor, the general assembly annually elects a council of state, consisting of seven persons. The governor is commander-in-chief of the militia; he can grant pardons and reprieves, unless when the prosecution has been carried on by the general assembly, and superintends the whole executive department. In the absence of the governor, his place is filled by the speaker of the senate, and failing him, by the speaker of the house of commons. The governor, judges of the supreme court of law and equity, judges of admiralty, and attorney-general, have salaries during their continuance in office. The treasurer and secretary of state are appointed by the general assembly; the former continues in office one year, the latter three years. Any officer of state may be impeached by the general assembly. No debtor to the state can be elected to any public office. No officer in the army, nor contractor or agent for the army or navy, can have a seat in the general assembly or council of state. No councillor can be a member of the general assembly. No judge of the supreme court of law or equity, no secretary of state, attorney-general, clerk of any court of record, nor clergyman, can have a seat in the general assembly or council of state. No person who denies the existence of the Deity, the truth of the Protestant religion, or the divine authority of the Scriptures, can hold any public office. Justices of the peace are appointed by the general assembly, commissioned by the governor, and hold their offices during good behaviour. No religious profession is established in preference to any other: nor can any one be compelled to maintain a minister of religion, or place of wor-

ship. No person can hold more than one lucrative office at a time. The delegates to congress are chosen annually by the general assembly, and no person can serve in that office more than three years successively.

In *South Carolina*, as in the other American states, the legislative power is vested in a general assembly, consisting of a senate and house of representatives. The number of senators is 35; that of representatives 124. The representatives are chosen biennially. To be qualified for this office, a person must be a free white man, 21 years of age: must have been an inhabitant of the state three years; and if he reside in the district for which he is chosen, he must have a freehold clear of debt to the amount of £150 sterling. If he reside not in that district, he must have a freehold within it, to the amount of £500 sterling. The senators continue in office four years. They are divided into two classes, one of which goes out every second year. A senator must be a free white man, 30 years of age. If he reside within the district which he is to represent, he must have a freehold amounting to £300 sterling, clear of debt. If he reside not within the district, he must possess a freehold worth £1000 sterling. He must have been an inhabitant of the state five years. To be entitled to the privilege of voting for members of the legislative body, a person must be a free white man, 21 years of age: must have been an inhabitant of the state two years, and must have been, for six months preceding the election, possessed of a freehold of 50 acres of land, or a lot in a town. The executive department is intrusted to a governor, chosen by the general assembly. His power continues two years, but he must have been four years out of office before he can be re-elected. The governor must have been an inhabitant of the state 10 years; he must be 30 years of age, and must possess, within the state, a freehold amounting to £1,500 sterling. The lieutenant-governor must be possessed of the same qualifications; he is chosen for the same time, and in the same manner; and officiates as governor in case of vacancy. The governor commands the militia, and grants pardons, except in case of impeachment. He convenes the assembly on extraordinary occasions, and adjourns them when they themselves cannot agree concerning the term of adjournment. He informs the assembly of the condition of the state; recommends such measures as he thinks necessary, and superintends the execution of the laws. The legislative body appoints the supreme judiciary officers, who hold their places during good behaviour; but they, as well as every officer of government, are liable to be impeached by the house of representatives, and tried by the senate. These judiciary officers enjoy a salary, but can hold no other office. All officers take an oath, binding them to the performance of their duty to this state, and to the United States.

The constitutions of the other states are so similar to those already given that it is needless to transcribe them. We cannot better conclude this outline of the legal institutions of the American confederacy than by quoting the following extract from a Discourse, pronounced by Mr Ingerall, before the American Philosophical Society in October, 1823:—“ The law has been much simplified in transplantation from Europe to America; and its professional as well as political tendency is still to further simplicity. The brutal, ferocious, and inhuman laws of the feudists, as they were termed by the civilians (I use their own phrase), the arbitrary rescripts of the civil law, and the harsh doctrines of the common law, have all been melted down by the genial mildness of American institutions. Most of the feudal distinctions between real and personal property, complicated tenures and primogeniture, the salique exclusion of females, the unnatural rejection of

the half-blood and ante-nuptial offspring, forfeitures for crimes, the penalties of alienage, and other vices of European jurisprudence, which nothing but their existence can defend, and reason must condemn, are either abolished, or in a course of abrogation here. Cognizance of marriage, divorce, and posthumous administration, taken from ecclesiastical, has been conferred on the civil tribunals. Voluminous conveyancing and intricate special pleading (among the costliest mysteries of professional learning in Great Britain) have given place to the plain and cheap substitutes of the old common law. With a like view to abridge and economise litigation, coercive arbitration, or equivalents for it, have been tried by legislative provision. Jury trial, the great safeguard of personal security, is nearly universal, and ought to be quite so, for its invaluable political influences. It not only does justice between the litigant parties, but elevates the understanding and enlightens the rectitude of all the community. Sanguinary and corporal punishments are yielding to the interesting experiment of penitential confinement. Judicial official tenure is mostly independent of legislative interposition, and completely of executive influence. The jurisdiction of the courts is far more extensive and elevated than that of the mother country. They exercise, among other high political functions, the original and remarkable power of invalidating statutes, by declaring them unconstitutional; an ascendancy over politics never before or elsewhere asserted by jurisprudence, which authorises the weakest branch of a popular government to annul the measures of the strongest. If popular indignation sometimes assails this authority, it has seldom, if ever, been able to crush those who have honestly exercised it; and even if it should, though an individual victim might be immolated, his very martyrdom would corroborate the system for which he suffered. Justice is openly, fairly, and purely administered, freed from the absurd costumes and ceremonies which disfigure it in England. Judicial appointment is less influenced by politics; and judicial proceedings more independent of political considerations."

Revenue.] On the subject of American finance and taxation, it ought always to be kept in mind, that each of the states in the union has a distinct government and legislature of its own, which levies taxes within the state, for defraying the expenses of its own militia, and the whole of its own civil administration, including the salaries of the governors, judges, and all other public officers, and the expense of the state-legislature, &c. These state-taxes are levied differently in different states. The revenues of the state of New Jersey, for instance, are raised by taxes on land, iron-works, mills, distilleries, breweries, ferries, fisheries, carriages, stages, taverns, horses, cattle, &c. But the most common way of raising the state-taxes, is by a poll-tax, and a property-tax. In Massachusetts, all the citizens from 16 to 60 years of age, are subject to the poll-tax; in Connecticut, all from 16 to 70. These state-taxes are never paid into the treasury of the government of the United States; nor do they make any part of the ways and means in the budget of the federal government presented yearly to congress. It is necessary to remark this, in order to prevent our readers from falling into the common mistake of those whose whole knowledge of American revenue and expenditure is derived from the newspaper reports of the president's speech, and the American budget as presented to congress; and who consequently suppose that the receipts and disbursements of the federal government comprise all that the people of the United States pay in taxes.

The annual revenue of the United States is from 22,000,000 to

25,000,000 of dollars, which—with the exception of about 2,000,000—is procured from custom-duties; but of this income 10,000,000 have been annually employed since 1817 in the payment of the interest and the extinction of the principal of the public debt, which, on the 24th of December, 1814, amounted to above 130,000,000 of dollars, but was reduced on the 1st of January, 1831, to 39,123,197 dollars, and will, it is calculated, be wholly paid off in the course of the year 1835.[5] The whole revenue to be provided for the expenses of the union, of every description, excluding the debt, is supposed to be 12,730,000 dollars, or L.2,550,000.

The following table shows the cost both of the general government, and of the separate states. The variation between the different states, in the sum raised for their civil lists and legislatures, and on what each person pays to the state-government, or to the state and general government together, is very considerable: and in forming an opinion of the comparative cost of government in America, it would be improper not to bear in mind, that many charges, corresponding to those which appear in the general accounts of European treasuries, are, in the United States, defrayed by the state-authorities. But, after all, few governments could stand the test either of a comparison of the total cost incurred by any given state, as New York, with that of the European community that most resembled it; or a comparison of the amount of contributions paid by individuals; and Mr Adams had just reason to boast, in his inaugural speech, "that all the purposes of human association had been employed in America, as effectively as under any other government on the globe, and at a cost little exceeding, in a whole generation, the expenditure of other nations in a single year." Under the diplomatic head, we find that each minister plenipotentiary receives an annual allowance of L.2,250 (with an outfit of the like amount); the chargé d'affaires, L.1,125; and the secretary of legation, L.500. Of the former, the United States has but eight, inclusive of two to the South American governments, Colombia and Mexico. Of the public functionaries, the president enjoys a salary of L.6,250; four secretaries of state L.1,525 each; an attorney-general, the same; a postmaster-general, the same; and the vice-president, L.1,250. The chief justice has L.1,250 per annum; and six associate justices, L.1,125 per annum each. There are 46 district judges, with salaries varying from L.600 to L.200 each; assisted by an attorney and a marshal, whose allowance, in no instance, exceeds L.50 a-year, independently of fees. For this scale of payment, however, there does not seem any complaint of the quality of the labours performed; but the American eulogist, Cooper himself, admits that the greatest public men of his country have been beggared in its cause. The total expense of the executive department in 1829 was 530,172, and of the judiciary 239,447 dollars. The following is the table already referred to; it is taken from captain Hall's 3d volume:

[5] It would appear that this debt has been raised at a rate equivalent to an annuity of somewhat more than L.5 6s. for every L.100. The American expenditure on the war, which terminated in the independence of the United States, has been made up to the 1st November, 1784, and has been computed at L.33,798,425; the moneys raised by the American treasury, on the credit of the infant government, amounted to L.89,875,000; so that it would seem, the average depreciation of its paper-issues, during the war of independence, was more than 63 per cent., or that each L.100 did not realise above L.37 12s. 9 7-16d. as available to the national emergencies. The loans and grants of money from France, beginning in 1778, and ending with 1783, amounted to 43,000,000 of livres, or L.1,960,000.

STATES AND TERRITORIES.	REVENUE.						EXPENSE OF	
	Receipt.	Expendit.	Each person pays to the State Government		Total each person pays to State and General Government		Legislature.	Civil List.
	Dollars.	Dollars.	Dol.	Cents.	Dol.	Cents.	Dollars.	Dollars.
Maine,	134,185	137,351	0	39	2	60	19,656	14,884
Massachusetts,	278,378	322,877	0	50	2	71	55,350	68,833
New Hampshire,	71,000	69,000	0	26	2	47	25,274	15,245
Vermont,	60,844	58,751	0	22	2	43		6,425
Rhode Island,	18,970	13,237	0	22	2	43		
Connecticut,	82,378	73,149	0	29	2	50	14,000	9,034
New York,	1,888,312	1,934,307	1	17	3	38	95,099	53,918
New Jersey,	41,200	36,000	0	14	2	35		
Pennsylvania,	2,359,113	2,341,716	1	98	4	19	94 244	110,513
Virginia,	897,969	890,608	0	72	2	93	110,386	77,155
Kentucky,	158,816	154,509	0	23	2	44	21,405	25,771
North Carolina,	88,702	80,890	0	13	2	34		
South Carolina,	316,937	393,170	0	57	2	78	18,000	68,000
Georgia,	215,445	295,745	0	58½	2	79	49,934	25 861
Tennessee,	99,533	81,515	0	18	2	39	22,587	20,652
Ohio,	189,484	163,776	0	23	2	44	26,906	18,000
Alabama,	67,317	82,014	0	26	2	47	23,279	25,534
Louisiana,	310,349	243,252	1	46	3	67	37,891	69,111
Illinois,	91,880	80,993	1	08	3	29	23,296	13,782
Total, . .	8,016,938 or L. 1,703,599	8,106,228 or L. 1,722,573	71 cents, or 3s.		2	91¾ or 12s. 4¼d.	693,173 or L. 147,304	677,305 or L. 143,927

Military Force.] It is evident that the warlike establishment of a great nation, removed by distance from the immediate danger of collision with powerful neighbours, can give no approximate idea of the resources of the country. The army of the United States is restricted by law to 6,186 men. The soldiers enlist for the limited period of 5 years, and are maintained at the annual expense of about 2,000,000 of dollars, or L.400,000. The balance of the sum annually appropriated for the department of war is destined to fortifications, ordnance, revolutionary and military pensions, (of which the invalid and half-pay in 1830 amounted to only L.26,650) and the Indian department, &c. The education given to the cadets at the West Point academy, and the experience of the two first campaigns of the war of 1812, are probably improving their military system. The old method of punishing offences by flogging was abolished by act of Congress in May, 1812. The national militia, according to the returns of 1828, amounted to 1,150,158 men, the respective contingents of the several states being as follows:

Maine,	40,209	Georgia,	39,056
New Hampshire,	30,150	Alabama,	23,000
Massachusetts,	54,935	Louisiana,	12,274
Vermont,	25,581	Mississippi,	5,291
Rhode Island,	9,460	Tennessee,	42,685
Connecticut,	25,731	Kentucky,	70,266
New York,	150,027	Ohio,	110,300
New Jersey,	42,283	Indiana,	37,787
Pennsylvania,	167,775	Illinois,	8,310
Delaware,	7,451	Missouri,	3,824
Maryland,	40,091	Michigan Territory,	1,503
Virginia,	100,662	Arkansas ditto,	2,028
North Carolina,	60,662	Florida ditto,	——
South Carolina,	36,429	District of Colombia,	2,317

Service in the militia entitles to the elective franchise; and all persons able

to bear arms are called on to perform military duty thrice a-year. But, according to captain Hall, the training does not exceed four or six days altogether in the year, and the militia-exercise is so loose, that they would require to be untrained whenever they were called out to actual service.

Marine Force.] A navy department was not created till 1798, nor a permanent naval peace establishment till 1801. The force was then reduced to 9 frigates; and, excepting an attack on Tripoly, was employed only on coasting duties until the war with England in 1812. The military marine in 1829 consisted of 7 ships of 74 guns; 6 frigates of 44 guns; 4 of 36 guns; 2 corvettes of 24; 12 sloops of 18; and 7 schooners; besides 5 ships of the line, with 6 frigates, in course of building. This force is understood to be in a situation to be prepared for sea at a short notice, but the greater part of it is kept in ordinary. The expenses of the naval establishment for 1828 were 3,786,649 dollars, or about L.750,000. The force in commission is manned by about 5,000 sailors and 1,000 marines. Of the excellence of the American naval *materiel* there can be no longer a question; but the lash is still, it appears, as much the disgrace of the American navy as it is of ours. We find it also acknowledged, in the report of the secretary of the navy to the president of the United States, dated 1st December, 1829, that the internal organization of the American navy is on the whole faulty. The things most complained of are: that there are no officers above the rank of captain or commodore,—that the pay is too small,—that the masters are not genteel enough, being, like those in our navy, chiefly taken from the command of merchant-ships,—that there is no naval academy, and no board of longitude,—and that the full dress of the officers is too expensive and gaudy, while their undress is "a uniform exclusively of buttons." Both captain Hall and lieutenant De Roos bear testimony to the great ingenuity of the Americans in every thing relating to their marine. At Washington, the dock-yard is 40 acres in extent. A 60 gun ship was building here, says De Roos: she had a round stern, but its rake and flatness, combined with the judicious construction of her quarter-galleries, gave it quite the appearance of being square. At this dock-yard they have a machine for making blocks by steam. The American schooners are the finest vessels of the sort in the world. At Baltimore De Roos saw a schooner building for the purpose of smuggling on the coast of China. "Every thing," says our lieutenant, "was sacrificed to swiftness, and I think she was the most lovely vessel I ever saw." The dock-yard at New York is admirably situated, and the structure of the ships beautiful. The Americans, in equipping their squadron on the lakes, evinced great energy. The three-decker which they built at Sackett's harbour, was run up in 42, or according to Hall 31 days, and 800 shipwrights were employed in her construction. Mr De Roos elucidates the deceptive mode of rating ships imputed to the Americans, and the economy of their marine. A mistaken notion has gone abroad, as to the Americans calling such ships as the Pennsylvania, seventy-fours, which at first sight, and to one not acquainted with the reason, bears the appearance of intentional deception. But this is explained by the peculiar wording of the act of Congress, by which a fund was voted for the gradual increase of the American navy. In it, the largest vessels were described as seventy-fours; but great latitude being allowed to the commissioners of the navy, they built them upon a much more extended scale. The only official mode of registering these is as seventy-fours; but, for all purposes of comparison, they must be classed according to the number of guns which they carry, and in this light they are

considered by all liberal Americans. On the second point, Mr De Roos says: "I was filled with astonishment at the system which permitted so fine a ship as the Ohio to remain exposed to the ruinous assaults of so deleterious a climate. She has been built only 7 years, and from want of common attention and care, is already falling rapidly into decay. I afterwards learned that this vessel was an instance of the cunning (I will not call it wisdom) which frequently actuates the policy of the Americans. They fit out one of the finest specimens of their ship-building in a most complete and expensive style, commanded by their best officers, and manned with a war-complement of their choicest seamen. She proceeds to cruize in the Mediterranean, where she falls in with the fleets of European powers; exhibits before them her magnificent equipment, displays her various perfections, and leaves them impressed with exaggerated notions of the maritime power of the country which sent her forth. She returns to port, having effected her object, and, such is the parsimony of the marine department, that she is denied the common expenses of repair." The same author gives us the following description of an *ice-boat*, or skaiting ship, invented by the Americans upon Lake Ontario:—"It is about twenty-three feet in length, resting on three skates, one attached to each end of a strong cross-bar fixed under the fore part, and the remaining one to the bottom of the rudder, which supports the stern of the vessel. Her mast and sail are similar to those of the common boat. Being placed on the ice, she is brought into play—her properties are wonderful, and her motion is fearfully rapid—she can not only go before the wind, but is actually capable of beating to windward. It requires an experienced hand to manage her, particularly in tacking, as her extreme velocity renders the least motion of the rudder of the utmost consequence. A friend of mine, a lieutenant in the navy, assured me that he himself, last year, had gone a distance of 23 miles in an hour, and he knew an instance of an ice-boat having crossed from York to Fort Niagara, a distance of 40 miles, in little more than three quarters of an hour."

CHAP. VII.—MANUFACTURES AND COMMERCE.

Historical Sketch.] The territories now composing the American confederation, were, when originally discovered, in their physical aspect and productions, vastly different from those which tempted the cupidity of the Spanish adventurers. They possessed neither gold nor silver; and the appearance of the country convinced the first settlers that they had exchanged their native home for no paradise. The character, too, of most of the original emigrants, was perfectly opposite to that of the followers of Cortez and Pizarro. Conscientious attachment to religious principle, and the desire of emancipation from the tyranny of the Episcopal hierarchy, were the professed objects and primary motives of the first adventurers. But if the colonists found not gold, they found what was equally valuable. Their difficulties impelled them to habits of active and laborious exertion. The country, though wild and wooded, was gradually cleared; and provisions were at length procured in such abundance as not only to supply their own necessities, but even enable them to procure some of the conveniences and luxuries of their neighbours. The parent-state, too, at that time rising into commercial eminence, began to perceive that her once despised colonies would soon become to her a source of extensive trade. To secure this

market for herself, was, as might be expected, the object of the mother-country. The state of the colonies was inquired into; prohibition succeeded prohibition; and the interests both of Britain and the colonies were often sacrificed to short-sighted maxims of policy, and the narrow views of a few selfish traders. A report was laid before the house of commons in 1732, by the board of trade, in consequence of information received from the governors of some of the principal provinces, from which it appeared, that at that time New Hampshire manufactured only a small quantity of linen-goods for its own use; and that its trade consisted almost entirely in naval stores, lumber, and fish. Massachusetts, it was stated, in 1719, manufactured a small quantity of woollen and linen-goods, but not nearly sufficient to supply its own consumption. Some iron-works had been established in that state, but did not supply one-twentieth of the demand. Ships were sometimes built there, and exchanged with the French and Spaniards for molasses, wines, rum, and silks. No manufacture deserving of notice existed in the state of New York, in 1720; its commerce consisted then in furs, whalebone, oil, pitch, tar, and provisions. In 1731, it remained in the same situation, receiving from the West Indies, rum, sugar, molasses, cocoa, indigo, cotton, and money, which was exchanged for British manufactures. The commerce of New Jersey, in 1720, chiefly consisted in the export of provisions to New York and Pennsylvania. Pennsylvania exported provisions and lumber, but at that time possessed no manufactures. In 1731, some coarse woollen and linen-goods were made there for home-consumption; and a few small vessels built for the West India market. Rhode island had no manufactures, but possessed a few iron-works,—one-fourth of the metal, however, necessary for its own consumption, was not produced. Connecticut seems to have equalled, if not surpassed, any of the other provinces in trade and industry; its inhabitants exported all kinds of lumber, grain, hemp, flax, tobacco, cattle, and horses; and the West Indies was their chief market, whence they received in return, sugar, molasses, and rum. Their manufactures, although too inconsiderable to permit exportation, or even to prevent importation, were more adequate to their own demands than those of any of their neighbours. The Carolinas were in their infancy at the period referred to; but South Carolina had begun to export rice.

Such were the humble beginnings of North American commerce. Humble, however, as its beginnings were, England had now become fully alive to its importance, and spared no pains to monopolize the whole; but in spite of the various restrictions from time to time imposed for this purpose, it continued rapidly to increase. This increase of commercial prosperity originated from a combination of causes, the chief of which seem to have been, abundance of good land,—the perseverance and industry of the settlers,—and the comparatively greater freedom of commerce which the North Americans enjoyed than the colonies of any other state. The land could not be engrossed by any individual. Whoever failed to cultivate and improve, within a certain portion of time, a certain portion of land, could be deprived of it. In several states, the lands of a person were, at his decease, equally divided among his children; instead, therefore, of possessions being accumulated, they were continually subdivided, and thus were cultivated much sooner than if they had been confined to a few proprietors. The parent-state also not only defrayed a great part of the ex penses of the civil government, but the whole charges of defence, leaving the colonists to accumulate wealth in security and peace. The colonies,

we have said, were laid under several restrictions in their intercourse with other nations, tending to secure to the mother-country the American market for her manufactures; but these were very trifling, when compared with those imposed on the colonies of other nations. The trade of the Spanish and Portuguese colonies was confined, by their respective parent-countries, to particular ports, and allowed to be carried on only by particular ships; the British colonies, on the contrary, were not only allowed to trade with every part of the mother-country indiscriminately, but—what was to them of vast importance—they were not obliged to bring the whole of their exported produce to Britain. A few articles—on this account denominated *enumerated commodities*—could be carried only to Britain; their other articles—called *non-enumerated commodities*—might be carried any where at first, and afterwards to any port S. of Finisterre. This privilege was the more valuable, because, among the non-enumerated commodities, were several, which constituted the staple of the commercial states, as grain, lumber, salt provisions, and fish. As to the civil government of the colonists, it was almost wholly entrusted to themselves. The intercourse of the colonies with each other was always entirely free; and this single advantage of free mutual intercourse, amongst a people whose numerical population was rapidly increasing, even though their foreign commerce had been more shackled than it was, could not fail of ensuring future wealth and power to the Americans. The trade of the colonies consequently continued to flourish and to increase annually, till their political separation from Great Britain. That event flattered them with a degree of prosperity much greater than they had ever enjoyed; but a little experience soon convinced them that their hopes were too sanguine. The first congress had not power to mark out such rules of national trade as were necessary to establish the general interest of the states. Each province consulted its own emolument; and none of them evinced so much patriotism as to be above enriching themselves at the expense of their neighbours. The consequences were soon visible; the more powerful and commercial states daily engrossed a greater proportion of wealth and influence; and in the same proportion, the inferior states became daily more feeble. Congress was at length invested with power to institute commercial regulations for the general use of the states; and accordingly made such use of the power, as could not fail to ensure to America a greater share of commercial importance than she had hitherto enjoyed.

But an event occurred on the continent of Europe, which in its consequences was productive of more commercial prosperity to the United States than any which have yet been mentioned, namely, the French revolution. That tremendous explosion, which desolated every continental state, and burst asunder every tie, political, moral, or commercial, which had bound together the various members of the European commonwealth, communicated a mighty impulse to American commerce. The annihilation of the French commerce, and eventually that of all the other European states, with the exception of Britain herself, combined with the awful catastrophe of St Domingo, which drove the remaining planters to America, was to her the source of wealth and prosperity. By the destruction of the Dutch commerce, she obtained the carrying-trade of Europe; and the inability of France, either to support her own colonies, or to import their produce, transferred to the United States all her colonial commerce. Even the growing prosperity of Great Britain was another source of advantage to America as the prodigious increase of British manufactures was followed

by a constantly increasing demand for such of those raw materials as constituted their bases. These advantages America enjoyed, till the intrigues of Bonaparte, the ascendancy of the anti-federalist party and war-faction, and the abuses which the Americans made of the neutral flag, involved her in disputes with Great Britain, which terminated in a war that completely deprived her of the carrying-trade, and of her foreign commerce, especially that with the latter power, which was more beneficial to the United States than all her other foreign commerce put together, as Great Britain was the chief market for her surplus produce.

Since 1805, manufacturing industry has made great progress. This was principally owing to the shackles with which the neutral trade was loaded by the belligerent powers, and especially during the late war, when America, deprived of all her foreign commerce, was necessitated to pay more than usual attention to domestic manufactures, in order to supply the absence of imported European, but especially British manufactures. The following branches are said to be now firmly established, supplying in several instances the greater, and in all a considerable part of the consumption of the United States, namely: iron and iron ware, manufactures of cotton, wool, and flax, hats, paper, printing types, printed books, and playing cards, spirituous and malt liquors, hemp-manufactures, gunpowder, window-glass, jewellery, and clocks, lead, straw-bonnets, hats, candles, leather, soap, and sugar. All branches of manufactures of which wood is the basis, are carried to a high state of perfection, and supply the whole demand of the United States. The annual produce of the American forests, including ship-timber and planks, pearl-ashes obtained from the trees on the newly cleared lands, and furs purchased from the Indians, is estimated at 15,000,000 dollars; of which 5,000,000 are exported, and 10,000,000 consumed in the country. Besides supplying the internal demand, 7,400 tons of pot- and pearl ashes are annually exported. The total annual value of the leather manufactures is estimated at 20,000,000 dollars annually. Tanneries on an extensive plan, are established in several cities of the union. A few hides are exported; but one-third of the hides used in the tanneries in the Atlantic states, is stated to be imported from the Spanish colonies. About 350,000 lbs. of American leather are annually exported. The principal leather-manufactures are those of shoes and boots, harness and saddles. Great part of the soap and candles used in the United States is a family-manufacture; but there are also several large establishments, on an extensive scale, in all the large cities, and in several other places. The annual value of these articles manufactured in the United States, including those of family-manufacture, is estimated at 8,000,000 dollars. The manufactures of spermaceti oil and candles, at Nantucket, and New Bedford in Massachusetts, and at Hudson in New York, besides supplying the whole of the domestic consumption, furnish annually, for exportation, 230,000 lbs. of candle, and 44,000 gallons of oil. The whole annual value of these manufactures is 300,000 dollars. Hat manufactures, to a large extent, are carried on in America. The hemp-manufacture is disappearing under Russian competition. In 1819, Russia imported only 251,356 lbs.; but in 1829 she imported 1,848,254 lbs. of hemp into this country. From the vast number of newspapers alone printed in the United States it might be very easily inferred, that there is a great demand for writing and printing-papers. Manufactures of these are established in nearly all the states, but the quality is bad; yet although some foreign paper is imported, the manufactures nearly supply the consumption.

The quantity of malt and spirituous liquors brewed and distilled in the United States, from grain and fruits, was estimated at 12,000,000 gallons; and that of gin and rum, at 3,000,000 gallons more, making a total of 15,000,000 gallons, in 1810; in 1825, the amount of spirituous liquors, manufactured within the Union, was stated at 60,000,000 of gallons. In manufactures of iron, the Americans are still very deficient; and the quantity manufactured is by no means equal to the consumption. A great portion of the iron necessary for manufacturing is imported. The greatest manufacture is that of cut nails, the annual produce of which is estimated at 1,200,000 dollars. Cutlery, and all the finer species of hardware and steel work are almost wholly imported from Great Britain. There are cannon-founderies at Richmond, and near Washington, which cast 300 pieces of artillery annually. Manufactories of muskets are established at Spring-field, New Haven, and Harper's Ferry, which produce annually 40,000 stand of arms. The annual average value of all the manufactures of iron is estimated at 15,000,000 dollars; and the annual importation, 4,000,000 dollars. Tin work is done and varnished in Connecticut and Massachusetts; but the greatest part of the copper-utensils are imported, especially from Germany. The quantity of lead imported, during the 10 years commencing with 1819, has averaged 7,835,923 lbs.; and that exported, 1,358,218 lbs. Gunpowder manufactories are established in several parts of Pennsylvania, New York, and Maryland; but the quality is very inferior to that of Europe; the saltpetre is chiefly imported from India, though there is abundance of that article in Virginia and the western states. The best glass is manufactured at Pittsburg; and the best earthen ware at Philadelphia, where a quality similar to that of Staffordshire in England is made. The annual quantity of window-glass manufactured in 1809 amounted to 27,000 boxes, containing each 100 square feet of glass. Boston crown glass is stated to be equal to any imported. Flint glass, of a very superior quality, is made at Pittsburg. The whole value of American manufactures was estimated by Mr Gallatin, in 1810, at 120,000,000 dollars, or £27,000,000 sterling.

Cotton and Woollen Manufactures.] The suspension and non-intercourse acts of the American government, depriving the Americans of the usual market for their cotton-wool, and of the accustomed importations of cotton-goods, induced them to pay redoubled attention to manufactures of cotton, both to supply their own consumption, and to avail themselves as much as possible of the superabundance of the raw material. But this attempt was successful only for a short interval, being forced upon them by an unnatural state of circumstances. The return of peace crushed their cotton-manufactures, and ruined nearly all the individuals concerned in these branches; but this branch of trade has been yearly recovering itself since that time. The first cotton-mill was erected in the state of Rhode Island, in 1791; another succeeded in the same state, in 1795; and two more, in Massachusetts, in the years 1803 and 1804. During the three succeeding years, ten more were erected in the state of Rhode Island, and one in Connecticut; making 15 cotton mills in all, erected before the year 1808, working at that time about 8,000 spindles, and producing 360,000 lbs. of yarn annually. In 1808, the cotton mills were increased to 87 in number, before the end of that year; 62 of which (48 water and 14 horse mills) were in operation, and worked at that time 34,000 spindles: 25 more were in operation, in 1811, making a total of 80,000 spindles. The capital vested in these mills was estimated at 4,800,000 dollars: the cotton wool employed

at 3,600,000 lbs.; value, 720,000 dollars; yarn spun, 2,880,000 lbs.; value, 3,240,000 dollars; and persons employed, 4,000; namely, 500 men, and 3,500 women and children. It must be observed, however, that the yarn made was very coarse, and the goods manufactured of the same description. Power-loom weaving is now going on in several of the states. The following extract of the report of a committee appointed to examine the state of manufactures, and which was presented to congress, will show the rapid progress of the cotton manufactures, from 1810 to 1815, when the vast influx of British manufactures almost annihilated them. The number of bales of cotton manufactured from 1800 to 1815 were as follows; 1800, 500 bales; 1805, 1,000 bales; 1810, 10,000 bales; 1815, 90,000 bales. The capital employed in 1815 was 40,000,000 of dollars; in 1826, the manufacture of cottons took off 175,000 bales, and supplied 14,000,000 yards of printed cottons. The importation of cotton goods, which, in 1825, was upwards of 12,000,000 of dollars, in 1826 was little more than 8,000,000. The factories of Lowell for coarse cotton stuffs, by the falls of the Merrimack, are probably the largest manufacturing extablishments in America, although the painted savages have here been driven out only within these few years by the white settlers. In addition to the high price of labour, a principal obstacle to the extension of woollen manufactures is the want of wool, which is also very deficient in quality, little attention having been yet paid in America to the rearing of sheep. Hosiery may be considered as almost exclusively a household-manufacture; attempts to establish manufactures of this kind have failed, and their hosiery is still very coarse. The woollen imported for consumption in 1826 was estimated at 8,000,000 of dollars. It is estimated that about two-thirds of the clothing, including hosiery, and of the house and table-linen worn and used by the inhabitants of the United States, who do not reside in cities, is the produce of family-manufacture. Mr Mallory estimates the capital invested in the manufacturing of woollen at 40,000,000 of dollars; and the agricultural capital, invested in raising the supply of wool, at 40,000,000 more; and 60,000 persons were supposed to be employed in this manufacture in 1827.

It has been keenly agitated among political economists, whether manufactures or agricultural industry are best adapted to America in her present state. The great obstacles to the introduction and improvement of manufactures, in the present state of things, may be reduced to the three following, namely: high wages,—deficiency of capital,—and the want of the subdivision of labour. The first is occasioned by the scarcity of hands, and the great number requisite for agricultural purposes; America has not yet a surplus population for manufacturing purposes, nor can she have for a long time to come. While good land remains to be cleared and settled, people will continue to emigrate. While agriculture and clearing new lands continue to be still the most profitable way of employing capital, little of it will receive any other direction. On the coast, and near large towns, where the population is more condensed and condensing, capitalists may employ their stocks in manufactures; but the continual emigrations issuing from such parts, to those which are more distant and unsettled, still keep them thin of inhabitants, and by preventing the fall of the price of labour, subject the American manufacturer to an unequal contest with those living in other countries where dexterity is not only greater, but labour cheaper. The second obstacle is the deficiency of capital possessed by individuals. Many, perhaps the majority of the American population, enjoy

that happy mediocrity of circumstances which has often been celebrated by those who could not relish its charms; but very few possess such large capitals as are necessary to the several branches of an extensive manufacture. The excessive price of European commodities, occasioned by a long sea-carriage, and the great profits demanded, has occasioned a considerable application to what have been called domestic manufactures, where each family fabricates several essential articles for its own use, without any attempt to carry them to a public market. These domestic manufactures have often been cited as proofs of American industry; but they might with equal injustice, perhaps, be adduced as an example of the great want of proper manufactures experienced by Americans. The greatest quantity and best quality of manufactured produce is undoubtedly obtained, when each person, applying himself to a particular vocation, acquires a dexterity to which he was at first a stranger; and each in that case can afford to sell the produce of his labour much cheaper than it could he made by one unacquainted with that particular employment. The person who, in Britain, should be found busy alternately at his plough, his loom, and his forge, would be deemed very unlikely to become either an expert farmer, weaver, or nailer. Even his prudence would be questioned, since, by applying assiduously to any one of these occupations, he could purchase the produce of the other two cheaper than by applying, in their turns, to all the three. Mr Cooper admits that many European articles are finished with a degree of minute perfection unknown as yet in America. "No one," says captain Hall, "has time in that busy country to attend effectually to the completion of any given job." When North America shall have attained that state which is proper for the encouragement of manufactures, it will experience that benefit of its raw materials, which at present afford employment to many of the trading nations of Europe. The Americans are fully sensible of the value and the importance of their materials. They have given all the encouragement to these manufactures which prudence suggested; and the consequence has been, that many have become so extensive, that, if they do not afford materials for exportation, they greatly diminish the necessity of importation.

Commerce.] The commerce of America may be viewed under two heads, namely, internal and foreign. The former is very inferior to the latter, from the thinness of the population, the small number of high roads, the mountainous nature of the tract that divides the eastern from the western states, and the small number of navigable canals. Having little else to exchange with each other but their agricultural productions, the interior commerce is confined chiefly to a coasting-trade. The rivers, however, with which the country is intersected, and which receive the tide up to a great height, are extremely favourable to an inland and coasting navigation. The useful invention of the steam-boat has also proved of vast service to inland navigation; and there is not a river of any magnitude, whether on the coast or in the interior, but what has steam-boats plying on it.[1]

1 According to the official statement furnished by the Custom-house authorities, the number of American vessels employed on the upper lakes is 53, and the aggregate amount of tonnage is 3611, exclusive of the steam-boats. The number of trips performed by the different vessels in the several parts in the lake, amount in the aggregate to 572. The article of salt alone, shipped for the upper country, has amounted for the season to 30,000 barrels, and in that proportion may be computed the gross amount of merchandise of all other kinds. When the Ohio and Pennsylvania canals are completed, it is confidently expected that this trade will acquire a much greater importance. At the opening of the Champlain canal, there were only 20 vessels on Lake Champlain; in 1828 there were no less than 218, and now the number is calculated at 250

The chief foreign commerce of the United States is still centred in British ports; and it is, on that account, still more their interest to be on friendly terms with Britain than any other power, as more of their raw and staple productions are consumed in this country than all other countries besides. France has enjoyed a considerable share of the American commerce since the epoch of North American independence. A considerable commerce is likewise carried on with Holland, Spain, Russia, and the Baltic. That with Africa is still inconsiderable, though the Americans are making strong efforts to establish a commercial intercourse with the powers situated on the shores of the Mediterranean sea. By the favour of Great Britain, the Americans also enjoyed a great share of the East India trade; but since this trade, except that branch of it which is carried on with China, has been thrown open to the British merchants at large, the Americans have been of course deprived, in a great measure, of what was formerly denominated the *private trade*.

In 1774, the whole of the American commerce, both exports and imports, amounted only to 13,000,000 of dollars. In 1784, it rose to 21,500,000 dollars; and, in 1794, to 67,043,725 dollars. After that period it increased prodigiously, owing principally to the calamities of the French revolution, which then began to spread its baneful influence over Europe. In 1801, the exports amounted to 93,020,515 dollars in value; and the imports to 88,900,000 dollars; making a total of 181,920,515 dollars, or £40,931,135 17*s.* 6*d.* sterling, estimating the dollars at 4*s.* 6*d.* each, or almost tripling the exports and imports of 1794, in the short space of seven years. In 1802-3-4, it rather diminished; but in 1805 it rose to the increased amount of 95,566,021 dollars in exports; and 96,000,000 dollars in imports; total 191,566,021 dollars, or £43,102,354 14*s.* 6*d.* The American shipping, that year, amounted to 1,443,453 tons. In 1806, the American commerce reached its acme, hitherto the exports being 103,000,000 dollars; 60,283,236 dollars of which were for foreign produce, exclusive of the freight and charges on that produce. Her imports, the same year, amounted to 108,000,000 dollars, making a total of £47,500,000 sterling. This extensive foreign commerce, that year, employed upwards of 1,500,000 tons of shipping, and 100,000 sailors,—enriched an infinite number of merchants, as well wholesale as retail,—spread life and motion through all the maritime towns of the American Union,—raised, as if by enchantment, the walls of Baltimore and New York,—and made Philadelphia one of the most flourishing towns in the world. The quantity of shipping employed by the city of New York alone, whose commerce, according to American official accounts, is one-eighth of the whole American trade, amounted to 263,227 tons, carrying 16,000 seamen; and the annual profits of the freightage alone of the foreign trade amounted to 15,000,000 dollars, or £3,375,000 sterling. The revenue of the American states rose in proportion to the rapid extension of her commerce. In 1792, the whole of the duties arising from foreign commerce, which formed nearly the whole of the revenue, amounted to 3,443,073 dollars. In 1805, they rose to 14,121,880 dollars, or £3,177,425 10*s.* sterling. In 1806, they amounted to 16,000,000 dollars, or £3,600,000 sterling. At an average of three years, namely, 1802-3-4, the foreign commerce of America amounted to 143,000,000 dollars; or 68,000,000 dollars exports, and 75,000,000 dollars imports; total, £32,175,000 sterling, making the respective sums of £15,300,000 sterling, and £16,875,000 sterling.

Nearly one-half of all the American trade was then with Great Britain and her dependencies, and still is. In 1771-2-3, the average exports to Great Britain were only £3,064,843; and imports, £1,322,593. In 1784, the exports were £3,397,500, imports only £749,329; but at the commencement of the 19th century, the commerce with Great Britain exceeded 60,000,000 dollars, or £13,500,000 sterling, on an average of three years, namely, 1802-3-4. In 1802, the exports to Great Britain alone, were 42,000,000 dollars, or £9,450,000 sterling. The article of cotton-wool alone, furnishes a strong proof of the importance of the British market for American produce. In 1770, the United States did not raise as much cotton as sufficed for her own consumption, but, on the contrary, was obliged to import that article from the West Indies, amounting to 500,000 lbs. and upwards. Their attention was, after that period, directed to rearing this article; and, in 1799, 31,359 bags were shipped for Great Britain, containing 6,271,800 lbs. valued at £313,590 sterling. In 1801, South Carolina exported 8,000,000 lbs. of cotton wool to Great Britain. In 1807, the quantity of cotton wool exported to Great Britain from the United States amounted to 171,554 bags, or 34,310,800 lbs. of cotton, or 140,193 bags more than in 1799, making an increase of 28,039,000 lbs. in eight years. The cultivation of the above quantity employed 147,046 negroes, who cultivated 300,346 acres of cotton plantations, or 250,348 acres more than in 1799. The value of the whole, averaged at one shilling English per lb., when shipped in the United States, was £1,715,540 sterling, or an increase of £1,401,950 sterling in eight years. This immense increase in the exportation of cotton-wool, produced a proportional increase in the shipping and hands employed in carrying this to Great Britain. Allowing each vessel to carry 500 bags, besides other goods, and navigated by 16 hands, this branch of commerce employed in 1799 62 vessels, navigated by 992 hands; but in 1807, it employed 343 vessels, navigated by 5,488 hands, making an increase of 281 vessels, and 4,495 hands, in eight years. The quantity of cotton wool exported in 1806, was 124,497 bags, containing 24,899,400 lbs. But in 1808, this commerce underwent a prodigious decrease, from the embargo laid on their own productions, particularly that of raw cotton, by the American rulers, in order to distress Great Britain. In 1809, 145,047 bags were imported into Great Britain, from the United States; and in 1810, 241,543 bags, or 48,308,600 lbs., which, averaged at one shilling per lb. when shipped in the American ports, would amount to £2,415,430 sterling. This quantity of cotton-wool exported was nearly one-half of the whole raw cotton imported into Great Britain in 1810, which amounted to 568,524 bags, and was valued at £8,527,860 sterling, the largest quantity yet imported into the country. The exportation of cotton wool, in 1807, produced a return to the United States, from Great Britain, deducting all charges and duty, but including freightage, of £1,947,063 6*s*. 8*d*. sterling. In 1815, the quantity of cotton-wool imported into Great Britain, from the United States, was 182,693 bags

Exclusive of the direct commerce with Great Britain alone, the Americans enjoyed a profitable and extensive intercourse with the British dependencies, especially the West Indies and British India. With the last, the Americans carried on a flourishing trade, and were in the habit of employing vessels of from 200 to 500 tons, which sailed chiefly in ballast, and carrying from 150,000 to 300,000 Spanish dollars each. The capital of the East India company was unable to embrace the whole of the trade,

a great part of which fell into the hands of the Americans, whose annual exports to British India averaged £908,362 sterling, and their imports from thence £836,455 sterling. Other American ships also went from the N.W. coast of America, with furs to Canton. But this brilliant career of American commerce was fated to undergo an eclipse; its decline commenced in 1807, and continued progressively till 1812, when America was completely deprived, by the war with Great Britain, of all her foreign commerce and carrying trade, which for several years averaged an annual profit of 30,000,000 dollars, or £6,750,000 sterling. The immediate precursors of this decline were, the Berlin and Milan decrees; the British orders in council; and finally, the retaliatory acts of her own government, which sealed her foreign commerce. In virtue of these decrees, American vessels with their cargoes, which had entered a port either immediately British, or belonging to her dependencies or allies, were captured by French cruisers, or seized and condemned the moment they entered a French port, unless they could show certificates that they had complied with these decrees. The losses which the Americans sustained by these captures and seizures, amounted to 30,000,000 dollars, or £6,750,000 sterling. The captures made under the orders in council were stated in president Maddison's speech to the senate, Nov. 1st, 1814, to have amounted to 1000 sail; which, allowing 20,000 dollars as the value of each ship and cargo, would amount to 20,000,000 dollars, or £4,500,000 sterling. So that the total of losses sustained under the combined operation of French decrees and British orders in council was £11,250,000 sterling. But the finishing stroke to their commerce, was the promulgation of the embargo and the non-intercourse bills, by their own government, in retaliation of the conduct pursued by the belligerant powers; although these acts were principally aimed at Great Britain.

After the return of peace, American commerce revived, although by the general pacification of Europe, the carrying trade, the source of much wealth and prosperity to the United States, was lost. A commercial treaty was made in July, 1815, between Great Britain and the United States, on a basis of reciprocity; and the benefit of the East Indian commerce was renewed to the Americans, as in the treaty of 1794. By a recent arrangement, American traders will enjoy in the colonial ports of Great Britain every privilege allowed to other nations.

Exports and Imports.] The whole exports of America, in 1826, amounted to 78,000,000 of dollars, of which 6,000,000 were domestic manufactures, being more than double the exports of domestic manufactures in 1821. The exports of domestic produce in 1828, amounted to £11,050,000; and of the manufactures to £1,600,000. The exports of foreign produce and manufactures was to the extent of £5,398,750. The total value of the exports of the United States, for the year ending the 30th September, 1828, was, therefore, £18,048,750. The imports of the year 1827 were £19,871,000, and the average imports between the years 1821 and 1827 have been £20,170,000 per annum. The imports of 1830 amounted to £15,412,500; and the exports to £16,605,000. The imports from Great Britain into the United States, in 1805, amounted to £11,011,409, and £435,530 for foreign and colonial produce, and in 1828 to £5,810,315.

The following is a table of the exports of the United States, from 1800 to 1821:—

Years.	Exports.	Domestic Growth, Produce, or Manufacture.	Foreign.
1800	70,971,780	31,840,903	39,120,877
1801	94,115,925	46,377,792	46,612,723
1802	72,483 160	26,182,173	35.774,971
1803	55,800,033	42,205,961	13,594,072
1804	77,699,074	41,467,477	36,231,597
1805	95,566,021	42,387,002	53,179,019
1806	101,536,963	41,253,727	60,283,236
1807	108,343,150	48,699,692	59,643,558
1808	22,430,960	9,433,546	12,997,414
1809	52,203,283	31,405,702	20,797,531
1810	66,757,970	42,366,675	24,391,295
1811	61,316,833	45,294,043	16,022,790
1812	38,527,236	30,032,109	8,495,127
1813	27,855,997	25,008.152	2,847,845
1814	6,927,441	6,782,273	145,169
1815	52,557,753	45,974,403	6,583,350
1816	81,920,452	64,781,896	17,138,556
1817	87,671,566	68,313,500	19,358,069
1818	93,281,133	73.854,437	19,426,696
1819	70,142,521	50,976,838	19,16 ,683
1820	69,691,669	51.683.640	18,008,029
1821	64,974,382	43,671,894	21,302,468

The imports have not been regularly published.

Currency and Banks.] With one exception, all the banks established in the United States are joint-stock companies, incorporated by law, with a fixed capital, a portion of which is sometimes vested in public stocks, but this is not obligatory. The business of these banks consists in receiving money on deposit, in issuing bank-notes, and in discounting bills of exchange. The capital of the state-banks, existing in 1830. amounted to nearly 110,500,000 dollars, thus:

	Capital.	*Notes.*	*Deposits.*	*Specie.*
281 Banks ascertained,	94,245,650	39,135,833	32,139,671	11,919,353
48 do. estimated,	16,188,711	9,400,000	8,500,000	3,000,000
329	110,434,361	48,535,833	40,639,671	14,919,353
United States Bank,	35,000,000	15,844,984	14,778,809	7.175,274
	145,434,361	64,380,817	55,418,480	22,094,627

The total amount of the paper currency, on the first of January, 1830, was estimated at 63,500,000 dollars. There are no means of ascertaining correctly what portion of this sum consists of the precious metals. The silver coinage of England forms nearly one-seventh part of the whole circulation of our own country; at this rate that of the United States—allowing for the various considerations which may affect the question—cannot be estimated at more than 10,000,000 of dollars. We have, therefore, the following results:

	Dollars.
Gross amount of notes issued,	63,500,000
Silver coins,	10,000,000
1st, Usual mode of computing,	73,500,000
And if deposits are included,	55,418,480
2d, Result,	128,918,480

But if the bank-notes of other banks on hand are deducted, the notes in circulation will be	54,000,000
Silver, ...	10,000.000
3d Result, ...	64,000 000
And if deposits are included, ...	55,418,480
4th Result, ...	119,418,480

The act of congress, of the year 1791, which declared that the dollar of the United States should contain 371¼ grains of pure silver, has fixed that quantity as the equivalent of a dollar of account, and as the permanent standard of value according to which all contracts must be performed. The medium par of exchange between the United States and England is about 4 dollars 75 cents for one pound sterling.

The *United States Bank* was incorporated by charter in 1791, with a stock of 10,000,000 of dollars, one-fourth of which was in specie; one-fifth of the whole capital was subscribed by the president in name of the States. But the war in which America was last involved with Britain completely deranged her circulating medium, and shook the basis of both public and private credit. To remedy these evils it was resolved to establish a new bank at Philadelphia, on the security of such ample funds as should ensure universal confidence, and thus give its notes a free circulation throughout the states. A bill for this purpose was therefore introduced to congress, and the capital, viz. 35,000,000 of dollars was instantly subscribed.

Post Offices.] In the year 1790, there were only 75 post-offices in the Union; there are now between 6,000 and 7,000 post stations; at the former period the whole length of post-roads did not exceed 2,000 miles, while there are now upwards of 90,000 laid out.

Commercial Navy.] A better idea of America as a maritime power, than a view of her infant navy presents, may be obtained by a reference to her commercial marine, which is second only to that of Britain. Indeed it would be easy to show that there are circumstances in the political organization of the United States which make it next to impossible that its warlike power should ever be in the ratio of its commercial opulence. The total merchant-tonnage of the United States, corresponding to the British registered tonnage, amounted in 1826 to 1,534,000 tons, being an increase of 11,070 tons within the year, which was more than double the increase in any one of the twelve preceding years. That of the United Kingdom is stated in the parliamentary returns to have been, in 1827, 2,105,605 tons. Of 606,000 tons employed in 1790, in the foreign trade, 251,000 belonged to foreigners. Of 611,000 tons employed in 1794, this proportion was reduced to 84,000; and of 880,000 in 1820, it had sunk 79,000. The exports of 1825 exceeded 92,000,000 of dollars; and of these, 81,000,000 were made in American vessels; the imports were 91,000,000, and of these 86,000,000 were made in the same. The exports of 1826 had sunk to 78,000,000, and the imports to 85,000,000 of dollars; but 70,000,000 of the exports, and 80,000,000 of the imports were carried in native ships.

CHAP. VIII.—CHIEF TOWNS.

Under the new census (1830) the cities and towns of the United States containing a population of 5,000, will range in the following order:

New York,	213,000	Petersburg,	8,300
Philadelphia and dependencies,	161,412	Alexandria,	8,221
Baltimore,	80,519	Newport,	8,010
Boston and Charleston,	70,164	Lancaster, Penn.,	7,684
New Orleans,	48,707	New Bedford, Mass.,	7,547
Cincinnàti and Liberties,	26,513	Savannah,	7,173
Albany,	24,216	Springfield, Mass.,	6,496
Washington,	18,823	Middletown, Conn.,	6,876
Providence,	16,832	Augusta, Geo.,	6,696
Pittsburg,	16,540	Wilmington, Del.,	6,626
Richmond,	16,065	Lewell, Mass.,	6,477
Rochester,		Newbury Port,	6,375
Salem,	13,826	Buffalo, N. Y.,	6,353
Portland,	12,521	Lynn, Mass.,	6,130
Brooklyn,	12,403	Lexington, K.	6,087
Troy, N. Y.,	11,405	Cambridge, Mass.,	6.071
Newark, N. I.,	10,900	Taunton, Mass.,	5,898
New Haven,	10,653	Reading,	5,621
Louisville,	10,126	Nashville,	5,560
Norfolk,	9,800	Wheeling,	5,211
Hartford,	9,617	Yorktown,	5,207
Georgetown,	8,441	Marblehead, Mass.,	5,132
Utica,	8,324	Roxburg, Mass.,	5,166

New York.] New York, which was for sometime the seat of the general government, occupies a healthy and commanding situation, at the confluence of the Hudson and East rivers, on Manhattan island. "Approaching the city at sunset," says a female traveller, "I shall not soon forget the impression which its gay appearance made upon me. Passing slowly round its southern point, formed by the confluence of the Hudson with what is called the East river, we admired at our leisure the striking panorama which encircled us. Immediately in our front was the battery, with its little fort and its public walks, diversified with trees, impending over the water, numberless well-dressed figures gliding through the foliage, or standing to admire our nearing vessel. In the back-ground, the neatly painted houses receding into distance; the spiry tops of poplars peering above the roofs, and marking the line of the streets. The city gradually enlarging from the battery as from the apex of a triangle, the eye followed, on one side, the broad channel of the Hudson and the picturesque coast of Jersey, at first sprinkled with villages and little villas, their white walls just glancing in the distance through thick beds of trees; and afterwards rising into abrupt precipices, now crowned with wood, now jutting forward in bare walls of rock. To the right, the more winding waters of the East river, bounded, on the one side, by the wooded heights of Brooklyn and the varied shores of Long Island, and on the other, by quays and warehouses, scarcely discernible through the forest of masts that were crowded as far as the eye could reach. Behind us stretched the broad expanse of the bay, whose islets, crowned with turreted forts, their colours streaming from their flag-staffs, slept on the still and glowing waters, in dark or sunny spots, as they variously caught or shunned the gaze of the sinking sun. It was a glorious scene, and we almost caught the enthusiasm of our companions, who, as they hailed their native city, pronounced it the fairest in the world." "The harbour of New York," says Duncan, "is one of the best in the country, and is capable of almost unlimited extension. The wharfs skirt both sides of the island, and piers project at right angles into the stream, leaving intermediate slips, which have many of the advantages of wet docks, and are free from several of their inconveniences. The tides rise and fall about six feet, but there is always water enough abreast of the piers to float the largest merchantmen. They do not, however, enjoy the advantage of dry docks, for the tide does not ebb sufficiently to empty

them, and mechanical means have not yet been resorted to; but vessels which need repair are heeled down in shallow water, first upon the one side, and then upon the other.' Masts surround the city like reeds on the margin of a pool; and when one passes along the wharfs, and witnesses the never-ceasing operations of loading and discharging, warping out and hauling in, vessels of every description arriving and sailing with every breeze that blows, together with the bustling of shippers, custom-house officers, sailors, and carmen, he cannot but be impressed with the great extent of the commerce which can supply such extensive means with such unceasing employment!' While nature has done so much for this city, as regards its pleasant and advantageous situation, art has as yet done little, at least in the way of ornamental architecture. Except the city hall, there is scarcely a public building worth noticing. "The streets, in the lower and older portion of the city," says Mr Duncan, "are very narrow and crooked, and, what is more immediately inexcusable, are kept in very bad order. Garbage and litter of almost every kind are thrown out upon the pavement, where a multitude of hogs of all ages riot in abundance. The foot-walks are incumbered with projecting steps and cellar-doors, lamp-posts, pump-wells, and occasionally poplar-trees; and where any open space occurs, barrels, packing-boxes, and wheel-barrows, are not unfrequently piled up. No town affords greater facilities for subterraneous drains, for the ground slopes on both sides from the centre to the water; and no town that I ever saw stands so much in need of them. The more modern streets are greatly superior in every respect: they are in general wide and straight, and the foot-walks are comparatively free from projections and incumbrances. The city is throughout very indifferently lighted; and in many places, the feeble glimmerings of a solitary oil-lamp must struggle past two stately trees, which stand like sentinels to defend it."

By its situation, New York commands not only the entire trade of its own state, but that of a great part of the northern and middle states; and for extent of foreign commerce it equals, if it does not surpass, every city in North America. Its harbour is inferior only to those of Rhode Island and Portland. The current, caused by the meeting of the two rivers, and the flowing of the tide through the narrow channels by which these rivers enter the ocean, prevent the roads from being frozen at any time; and the inhabitants of New York have made every use of the advantages of their situation. Their trade with almost every commercial part of the world is very extensive. In 1640, New York was a mere village, and the only dwelling-houses were few, low, and straggling. The most prominent buildings were then, according to its erudite and right pleasant historian, Diedrich Knickerbocker, "the fort, the church of St Nicholas, the jail, the governor's house, the gallows, the pillory, the West India stores, and the city tavern," of which there are now no remains. In 1697, 34 years after the Dutch had been expelled by the English, the population of New York amounted to only 4,302 persons. In 1790, it had increased to upwards of 33,000 (including 2,369 slaves). In 1810, it had risen to 96,000; in 1816, to 100,619; in 1819, to 119,657; in 1826, to 166,086; and in 1830, to 213,000, including the population of Brooklyn on the opposite shore of Long Island, which may be considered as a suburb.—For a long time after the independence of the United States had been established, New York had to contend for supremacy against a powerful rivalry. Philadelphia, distant less than 100 miles, was not only more

wealthy and more populous, but, for many years, it enjoyed the eclat and advantage of being the capital of the Union, while Boston and Baltimore were both sea-ports of extensive connections and of great and enlightened enterprise. Against this serious competition, however, New York struggled with success, gradually obtaining the superiority in tonnage and in population; until, within a few years, opposition has silently yielded to the force of circumstances, and those towns, which had so long been rivals, have become auxiliaries to her aggrandisement. In 1793, the number of vessels that entered this port from foreign countries was 683, and coastwise, 1381. The exports had amounted, the preceding year, to 2,535,790 dollars, and the customs to 1,256,738 dollars. In 1795, the customs were double that amount, and the exports had quadrupled. In 1816, the latter amounted in value to 19,690,031 dollars. In the following years they declined, amounting, in 1820, to only 13,163,244 dollars, of which about one-third was foreign produce. But, in 1825, they had risen to 35,259,261 dollars, of which foreign produce constituted two-fifths. The revenue collected at this port has amounted, of late, to one-fourth of the total sum collected by government throughout the United States.

Philadelphia.] Philadelphia, the capital of Pennsylvania, and, prior to the revolution, the capital of the United States, was in 1683, founded by William Penn, on a spot of ground purchased from the Swedes. It stands 5 miles above the confluence of the Delaware and Schuylkill rivers, in 39° 56′ N. lat. and 75° 8′ 45″ W. long. The Delaware, opposite to it, is one mile wide; but deep enough to carry a ship of 74 guns; and the distance of the city from the sea, following the course of the river, is 120 miles. A canal 13½ miles in length, commences in the Delaware, above 40 miles below Philadelphia, and runs W. to the Elk river, a tributary of the Chesapeake. Philadelphia received a charter, and was erected into a city in 1701; which charter being vacated by the revolution, it was, in 1789, renewed by the present legislature. It is governed by a mayor and recorder, 15 aldermen, chosen by the freeholders, and 30 common-council men, chosen by such citizens as may vote for representatives in assembly. The first appearance of the city, stretching along the bank of the Delaware "in magnificent extent," Mr Howison thought, "very imposing." Ships of every description are seen at anchor in the river, and give the city a commercial and busy aspect. Mr Duncan (who visited it in 1818) says: "The appearance of the city from the river is by no means imposing; rather the opposite. The ground is generally level, and the mass of buildings present a dull, heavy uniformity. Most of those along the bank are by no means elegant, and only a solitary steeple rises above the dense horizon." Thus travellers differ; less widely, however, in meaning than in words; for, while there is nothing imposing, in the sense of deceptive in the first view of the city, nothing picturesque in its site, nor magnificent in its architectural character, it is very conceivable, that its "unbroken aggregate of buildings," with all the signs of mercantile wealth and bustle, must derive a sort of grandeur from its very extent and from the ideas connected with the moving scene. "The aspect of the city, however," continues Mr Duncan, "improves amazingly when you enter the streets, which are wide, straight, and clean, and, with only one exception, cross each other at right angles. The houses are in general of painted brick; but some of the more modern have a flight of marble steps in front; and the lintels of the doors and windows, and even the side walk in front, are

of the same beautiful materials." The original character of Philadelphia, however, not merely as regards its architecture, but in all other respects, has undergone, and is still undergoing, a strange metamorphosis. "In a religious point of view," says Mr Duncan, "Philadelphia, though strongly characterized by the peculiarities of its Quaker origin, is not so much so as I had previously imagined. The Friends are now prodigiously outnumbered by those of other persuasions; and many who retain the name of the sect, have laid aside some of the peculiarities by which the more rigid are distinguished. This is particularly the case with those of younger years. In dress, there seems to be a kind of hesitating approximation to conformity with modern taste; and there are some individuals who, though careful, in writing, to retain the well-known formula in date, address, and signature, have no objections, in conversation, to concede the usual courtesies of polite intercourse. Passive obedience and non-resistance have been generally esteemed essential to Quaker principles; but a considerable party in this city separated from the main body, during the revolutionary war, in consequence of maintaining the propriety of fighting for the national independence. They still continue to be a distinct class, justifying an appeal to the sword in defence of national rights." They are known under the appellation of Free Quakers. Some idea of the proportional numbers of the various nations and religious denominations comprised in the motley population of this city, may be formed from a list of the places of worship. In the year 1749, Philadelphia contained 2076 houses, about 11,600 inhabitants, and eleven places of worship; viz. 2 Presbyterian, 2 Quaker, 1 Episcopalian, 1 Swedish, 1 Baptist, 1 German Lutheran, 1 German Calvinist, 1 Moravian, and 1 Roman Catholic. In 1790, when the number of houses had increased to 6651, and the inhabitants to 42,520, the places of worship were 26 in number, including 6 Presbyterian churches, 5 Quaker, (one of them for Free Quakers,) 3 Episcopalian, 3 Roman Catholic, a second German Lutheran, a second Baptist, (Universal,) a Methodist, a Jews' synagogue, and the other places of worship, Swedish and German, already enumerated. In 1820, the population of the city was 63,802; that of the suburbs and county, 73,295; together, 137,097. Of these, 7331 within the city, and 3398 in the suburbs, were persons of colour; but slavery had been, in the mean time, happily extinguished. In 1830, the places of worship in the city and suburbs were 92.

Baltimore.] Baltimore is one of the largest towns in the United States. It stands on the N. side of Patapsco river, in Maryland. It was formerly reckoned very unhealthy, and after every modern improvement, it is still only tolerably healthy. The basin upon which it stands has only five or six feet water at full tide, so that the town can be approached only by small vessels. The harbour for larger ships is at some distance, at a place called Fell's Point. At this point, which is separated from Baltimore properly so called by a creek, stand a considerable number of houses, which are generally reckoned part of the town. Population in 1820, 62,627; tonnage 68,674. "Of late years," remarks captain Basil Hall, "it has come nearly to a stand-still, in consequence of events over which, I much fear, the inhabitants have no control. During the long period of the late European war, this city flourished, like some others in America, under the neutral flag. It was a place of much greater consequence, too, before the New York canal drained off from the interior of the country much of that export trade which the capital and the industry of the citizens of Baltimore had long turned to such profitable account. The peace

which brought the full weight of continental as well as English resources into the open field of competition, gradually lessened the importance of Baltimore, Boston, and Philadelphia, and of many other places in America, which cannot boast, like New York, of enjoying peculiar local advantages, that promise to flourish and improve under all political changes. The proximate causes of the declension of Baltimore, therefore, are not only the alteration of the times consequent upon the general peace, but the much higher commercial facilities existing at the two great ports of New York and New Orleans. There are projects afloat, however, for restoring this lost balance to Philadelphia and Baltimore, and of regaining some portion of the profits derived from supplying the western country with goods, and of drawing off its produce. This, it is hoped, may be accomplished by means of a rail-road from Baltimore on the Chesapeake, and a canal from Philadelphia on the Delaware, both striking the Ohio, over the Alleghany mountains. If the mouth of the Mississippi could be dammed up, or the harbour of New York be demolished, there might be some chance for the resuscitation of the intermediate sea-ports; but, in the meantime, I suspect, both Philadelphia and Baltimore must be contented to enjoy their local, but comparatively limited advantages, without attempting to rival those great emporiums. The natural obstacles which stand in the way of any direct communication between the western country and the coast are so numerous and formidable, that I fully believe, if the proposed canal from Philadelphia to Pittsburg, which stands at the point where the confluence of the Monongahela and the Alleghany forms the commencement of the Ohio river, or the rail-road from Baltimore to Wheeling, on the left bank of the same magnificent stream, could be laid down free of expense, the transit of goods upon them would not do much more than defray the cost of keeping them in repair."

Boston.] Boston, situated at the bottom of Massachusetts bay, is, in America, a town of considerable antiquity, having been founded 200 years ago. It is the capital, not only of the state, but of the whole of New England. It stands upon a small irregular peninsula, joined on the S. side by a narrow neck, about one mile in length, to the continent. It has outgrown the limits of its natural position, and Charleston, upon an opposite peninsula, and South Boston, upon the mainland, may be regarded as integral parts of the city. The town is irregularly scattered round the harbour, but affords from the sea a very pleasant prospect. The streets, however, on a near inspection, are found to be narrow, crooked, and disagreeable. It contains 25 churches, and 215 schools; it is also honourably preeminent in the number of its literary institutions. The harbour is extremely convenient; and sufficiently large to contain 500 vessels. The entrance, which will scarcely admit of two ships a-breast, is defended by a castle situated about 3 miles from the town. The manufactures chiefly carried on in this town are those of rum, beer, paper-hangings, loaf sugar, cordage, cards, sail-cloth, candles, and glass. Population in 1811, 33,250, and in 1820, 43,298. Dr Dwight has devoted a chapter to the character of the Bostonians, a part of which we may here quote: "The Bostonians, almost without an exception, are derived from one country and a single stock. They are all descendants of Englishmen, and of course are united by all the great bonds of society,—language, religion, government, manners, and interests. With a very small number of exceptions, they speak the English language in the English manner; are Protestants; hold the great principles of English liberty; are governed voluntarily by the Eng-

lish common law, and by statutes strongly resembling those of Great Britain, under a constitution essentially copied from the British, and by courts in almost every respect the same. Their education also differs very little in the school, the shop, the counting-house, or the university. Although they are republicans, and generally congregationalists, they are natively friends of good order and firm government, and feel the reputation of Old Massachusetts in much the same manner as an Englishman feels the honour of Old England. Every New Englander, with hardly an exception, is taught to read, write, and keep accounts. By means of this privilege, knowledge is probably more universally diffused here than in any other considerable town in the world. A great number of the inhabitants also have been liberally educated. Boston is distinguished for its habits of business. A man who is not believed to follow some useful business can scarcely acquire or retain even a decent reputation. A traveller passing through it is struck with the peculiar appearance of activity everywhere visible. Almost all whom he meets move with a sprightliness differing very sensibly from what he observes in New York or Philadelphia. Not less distinguished are the inhabitants, particularly in the middle and inferior classes, for their intelligence and information. In a singular degree they are acquainted with the affairs of the town itself, and with the residence and character of almost every inhabitant. I have rarely met a child who could not tell me both the street and the house for which I inquired. Nor are they less distinguished for civility. A Bostonian, if not pressed by business of his own, will readily accompany a stranger to the house which he wishes to find, and will scarcely appear to feel as if he conferred the least obligation. The people of Boston are characteristically distinguished by a lively imagination, an ardour easily kindled, a sensibility soon felt and strongly expressed. They admire, where graver people would only approve; detest, where cooler minds would only dislike; applaud a performance where others would listen in silence; and hiss where a less susceptible audience would only frown. This character renders them sometimes more, sometimes less amiable, usually less cautious, and often more exposed to future regret. From this source, their language is frequently hyperbolical, and their pictures of objects in any way interesting, highly coloured. Hence, also, their enterprises are sudden, bold, and sometimes rash. A general spirit of adventure prevails here, which, in numerous instances, has become the means of attempts made with honour and success, in cases where many of their commercial neighbours would have refused to adventure at all."

Charleston.] Charleston is the principal town, not only of South Carolina, but of the southern states. It is situated on a promontory formed by the confluence of the Cooper and Ashley rivers. The streets run in straight lines, from river to river, and are crossed by others nearly at right angles. They are generally narrow; and the houses, for the most part, are of wood. The chief public buildings are an exchange, state-house, armoury, and poor-house. "What gives Charleston its peculiar character," captain B. Hall says, "is the veranda, or piazza, which embraces most of the houses on their southern side, and frequently, also, on those which face the E. and W. These are not clumsily put on, but constructed in a light oriental style, extending from the ground to the very top, so that the rooms on each story enjoy the advantage of a shady, open walk. Except in the busy, commercial parts of the town, where building ground is too precious to be so employed, the houses are surrounded with a garden crowded with

shrubs and flowers of all kinds, shaded by double and treble rows of orange-trees; each establishment being generally encircled with hedges, of a deep green, covered over with the most brilliant show imaginable of large white roses, fully as broad as my hand. The houses which stand in the midst of these luxurious pleasure-grounds, are built of every form and size, generally painted white, with railed terraces on the tops; and every house, or very nearly every one, and certainly every church spire, of which there are a great number, has a lightning-rod or conductor." "Streets, unpaved and narrow, small wooden houses, from among which rise, in every quarter of the town, stately mansions surrounded, from top to bottom, with broad verandas, and standing within little gardens full of orange-trees, palm-trees, and magnolias, are features;" says another traveller, "which give Charleston an expression belonging to the S. of Europe, rather than to the Teutonic cities of the N. Perhaps, taking into view its large black population, and glowing temperature in January, it is not very unlike some of the cities on the Mediterranean coasts of Africa. In other respects, it is a noble monument of what human avarice can effect. Its soil is a barren, burning sand, with a river on each side, overflowing into pestilential marshes, which exhale a contagion so pernicious, as to render sleeping a single night within its influence, during the summer-months, an experiment of the greatest hazard. But what will not men do and bear for money? These pestilential marshes are found to produce good rice, and the adjacent alluvial lands, cotton. True it is, that no European frame could support the labour of cultivation; but Africa can furnish slaves, and thus, amid contagion and suffering, both of oppressors and oppressed, has Charleston become a wealthy city; nay, a religious one, to judge by the number of churches built, building, and to be built." The harbour formed by the junction of the two rivers is commodious, and may be entered by any vessel drawing less than 19 feet water. The population is estimated at 30,000, about half of whom are slaves.

New Orleans.] The city of New Orleans, since the acquisition of Louisiana, is the second in point of trade, and deserving of attention in every point of view. By its situation, it commands, in a great measure, the important navigation of the great river Mississippi, upon which essentially depends the prosperity of the western settlements. This city was founded in the time of the Mississippi scheme, about 1720, under the regency of the duke of Orleans, from whom it takes its name. "New Orleans, the *wet grave*, where the hopes of thousands are buried,—for eighty years the wretched asylum for the outcasts of France and Spain, who could not venture a hundred paces beyond its gates, without utterly sinking to the breast in mud, or being attacked by alligators,—has become," says the author of the 'Americans as they are,' "in the space of twenty-three years, one of the most beautiful cities of the Union, inhabited by 40,000 persons, who trade with half the world. The view" (approaching the city from the interior) "is splendid beyond description, when you pass down the stream, which is here a mile broad, rolling its immense volume of waters in a bed about 200 feet deep, and, as if conscious of its strength, appearing to look quietly on the bustle of the habitations of man. Both its banks are lined with charming sugar-plantations, from the midst of which rises the airy mansion of the wealthy planter, surrounded with orange, banana, lime, and fig trees, the growth of a climate approaching to the torrid zone. In the rear, you discover the cabins of the negroes and the sugar-houses, and just at the entrance of the port, groupes of smaller

houses, as if erected for the purpose of concealing the prospect of the town. As soon as the steam-boats pass these outposts, New Orleans, in the form of a half-moon, appears in all its splendour. The river, having run for four or five miles in a southern direction, here suddenly takes an eastern course, which it pursues for two miles, thus forming a semicircular bend. A single glance exhibits to view the harbour, the vessels at anchor, and the city, situated as it were at the feet of the passenger. The first object that presents itself, is the dirty and uncouth backwoods flat boat. Hams, ears of corn, apples, whisky-barrels, are strewed upon it, or are fixed to poles, to direct the attention of the buyers. Close by, are the rather more decent keel-boats, with cotton, furs, whisky, flour. Next, the elegant steam-boat, which, by its hissing and repeated sounds, announces either its arrival or departure; sending forth immense columns of black smoke, that form into long clouds above the city. Further on are the smaller merchant vessels, the sloops and schooners from the Havannah, Vera Cruz, Tampico; then the brigs; and lastly, the elegant ships appearing like a forest of masts. The city of New Orleans occupies an oblong area, extending 3,960 feet along the eastern bank of the Mississippi, embracing six squares, 319 feet in length, and of equal breadth. Above and below this parallelogram are the suburbs. The seven streets which run parallel with the river, are intersected at right angles by twelve running from the banks of the Mississippi. The city, with the exception of the Levee and Rampart-street, is paved; an improvement which occasions great expense to the corporation, as the stones are imported: flags, however, are not wanting, even in the most distant suburbs. The ground on which New Orleans is built, is a plain descending about seven feet from the banks of the river, towards the swamps. It is secured by the Levee, which would afford very little resistance four hundred miles higher up; but here, where numerous bayous and natural channels have carried off part of the waters to the gulf of Mexico, it answers every purpose. About the city, the breadth of this plain is half a mile, and above it, three quarters of a mile, terminating, in the back ground, in impenetrable swamps. The city and suburbs are lighted with reflecting lamps, suspended in the middle of the streets. Between the pavement and the road, gutters are made for the purpose of carrying off the filth into the swamps, of refreshing the air with the waters of the Mississippi, with which these gutters communicate, and of allaying the dust during the hot season. There are now about six thousand buildings, large and small, in New Orleans. In the three principal streets, and the greater part of the upper suburb, the houses are throughout of brick: some are plastered over, to preserve them from the influence of the sultry climate. There are now four banks in New Orleans, and five insurance-offices. There are also no fewer than six masonic lodges, and two theatres, a French and an American one. Close to the latter are the ball-rooms, where are given the only masked balls in the United States. A reading-room and circulating library, you would seek in vain in New Orleans. A steam saw-mill in the upper suburb, with a few iron-foundries, are the only manufactories, every thing being imported from the north. No fewer than 1500 keel and flat boats, besides nearly a hundred steam-vessels, are employed in the trade with this city. The number of vessels that clear out annually, is upwards of 1000. The wealth accruing to the city from this commerce, is out of proportion to the number of inhabitants. There are many families who, in the course of a few years, have accumulated a property yielding an income of 50,000 dollars; and 25,000 is the usual

income of respectable planters. No other place offers such chances for making a fortune in so easy a way. This accounts for the eagerness with which thousands repair to New Orleans, in spite of the yellow fever, which makes room again for thousands in rapid succession. When the United States took possession of New Orleans (in 1803), the city contained 1000 houses, and 8000 inhabitants. In the year 1820, the population amounted to 27,000; in 1821, to 29,000; in 1822, to 32,000; and in 1826, to nearly 40,000; viz.

	Males.	Females.	Total.
Whites,	14,500	7,500	22,000
Free Coloured,	3,690	800	4,490
Slaves,	5,500	6,300	11,800
Foreigners,			1,300
			39,590

Though situated 105 miles above the mouth of the river, it has a speedy communication with the coast of Mexico and the West Indies, and cannot fail to become the grand receptacle for the produce of all the prodigious extent of country watered by the Mississippi, Missouri, Ohio, and their numerous tributary streams.

Washington.] The following description of the city of Washington is taken from an American publication:—"The city of Washington, which forms an important section of the district of Columbia, was selected by general Washington, from whom it takes its name, as the metropolis of the United States; and no selection could have been more judicious or excellent. Its central situation—the romantic and picturesque beauty of its site—the salubrity of its climate—and the excellence of its water—all combine to render it the most desirable spot in the United States. It comprises a square of four miles in extent, and is watered by the Patomac and Anacostia rivers, which add to its natural beauty, and will contribute to the facility and prosperity of its commerce. There are on each side of those rivers, and, indeed, in almost every possible direction, the most beautiful elevations. The city is divided into squares by streets running N. and S., E. and W.; but to destroy the sameness and insipidity which this plan would produce, there are diagonal streets or avenues, leading from one public place to another, which tend to diversify and variegate prospects naturally elegant. The avenues are called after the different states which constituted the Union at the time when the city was laid out, and from 130 to 160 feet wide, including a pavement of 10 feet, and a gravel-walk of 30 feet, planted on each side with trees. The other streets are from 90 to 110 feet wide, and are named numerically when they run from N. to S., and alphabetically when from E. to W. The eastern branch or Anacostia river, affords, from the depth of its channel, and its security from storms, one of the safest and most commodious harbours in the United States, and will unquestionably become, from the convenience which the canal, now nearly completed, will afford the most commercial portion of the metropolis. The capitol is a large and massy edifice, of freestone, built according to the Corinthian order, and situated on a beautiful elevation of ground, equidistant from the eastern branch and president's house. Only two wings of this elegant edifice have yet been completed. A delightful avenue leads from the capitol to the president's house, another elegant edifice, built also of freestone, according to the Ionic proportions. The next object in the city to which the attention is attracted is the navy

yard. This establishment is at present resuscitating from the mouldering ruins of war, and will, from the attention government seems to pay it, soon surpass the flourishing condition which it had once attained. There is, perhaps, no situation in the United States better calculated than this for a national establishment of this kind. The facility with which materials and munitions of war can be procured, the depth and excellence of the harbour, and its security from destruction by storms and enemies, particularly when the Chesapeake, which is now in contemplation, shall be properly and effectually defended, contribute to render it an essential object of governmental attention." It is evident that the above description of Washington rather refers to what it is intended to be, than to what it already is. In consequence of the gigantic scale on which Washington has been planned, and the different interests which influence the population, its inhabitants are, in fact, separated into four distinct towns, distant from each other about a mile. Thus we have George-town in the W., containing 9000 souls; the town immediately round the president's house, with perhaps 10,000; that round the capitol, containing between 2000 and 3000; and the buildings at the navy-yard, which lies on the E. branch, still a mile further. The three divisions of the city itself, with here and there a few scattered buildings, may now contain, Mr Cooper says, about 16,000 souls. George-town, though in the district of Columbia, and quite as near to the president's house as is the capitol, is not properly a part of the city, having a distinct municipal government. Alexandria, a little city of about 9000 inhabitants, is also within the limits of the federal district, but lies on the opposite side of the Patomac, at a distance of six miles. The whole district may contain about 40,000 souls. The quarter of the president's house is less compact and more populous than either of the others, and forms properly the heart of the city. A few of the streets have the air of a town; though there is, in every part of this place, a striking disproportion in magnitude between the streets and the houses. In order to produce the effect intended, the buildings in the Pennsylvania Avenue, for example, should be of six or seven stories; whereas they are, in fact, some such houses as one sees in an English country-town. Another striking defect in the plan, is also made manifest by the waste of room in this avenue. As the avenues cross the street obliquely, it is plain, the points of intersection must make a vast number of acute angles. There is always on one side of each street, between that street and the avenue, a gore of land, so narrow that it will never be built on, until real estate shall get to be far more valuable than it is likely soon to become here. Consequently, the distances are unnecessarily increased; and by this means, and its four different quarters, Washington has all the inconvenience of an immense town, with scarcely any of its counterbalancing advantages. George-town is a well-built, clean, and rather pretty town. The avenues between this place and the navy-yard, a distance of nearly five miles, resemble a high road through an open country but little cultivated, on which stand one straggling town and a village, and which terminates in a cluster of houses. The buildings of the towns and villages on the route, are much like those of other small towns, with the exception of the public edifices, which are like those one sees in a city. If you can reconcile all these contradictions, you may get a tolerably accurate notion of the capital of the United States. "In many respects," says Mr Hodgson, "Washington reminded me very much of a watering-place. Scarcely any of the members reside here, except while congress is sitting; and then they are in lodgings. The ladies

who accompany their fathers or husbands, to see a little of the world, are situated very much as they would be at Harrowgate or Cheltenham; and there are usually many strangers in pursuit of entertainment. It is the residence also of the foreign ministers, and the heads of the departments of government. All this gives rise to much dissipation. On some of the evenings, there are routs at the houses of one or other of the ministers of the *corps diplomatique*, and the rest are generally anticipated by two or three invitations. All, however, complain that this routine becomes very dull before the session closes, as they meet almost the same persons every evening, and the sober ones will seldom go out above two or three times a-week. Families who are acquainted with each other, often board together at the large taverns; and the members who are bachelors for the time being, form messes at the private boarding-houses, where they are often in very close, and sometimes in very shabby quarters. I think, quite the majority of the members go to the capitol in hackney-coaches; and as the ground has been covered with snow, I have several times seen a sledge and four, with eight or ten senators from George-town in the neighbourhood."

House of Representatives.] "I have spent nearly every morning," continues the same author, "at the senate or house of representatives. These beautiful chambers are calculated to make an impression very favourable to the dignity of the deliberative assemblies which occupy them; and the general appearance of the members does not materially impair it. Many of them have the appearance of English country gentlemen; and a considerable proportion of them are lawyers, who carry in their faces those marks of intellectual exertion which seem to plead some apology for having sacrificed little to the Graces. Some of the members from the western country, indeed, would look a little queer in our house of commons. The proceedings both of the senate and the house of representatives, seem to be conducted with great order and decorum, and with a courtesy and attention to the feelings of 'honourable gentlemen,' which I was not prepared to expect. The style of their best speakers is fluent, forcible, and perspicuous; and in cases where it is not possible that their arguments should be sound, they seldom fail to be specious and acute. My friend, who would, I believe, be considered the first authority on the subject, told me, that he considered their two prominent faults to be, a proneness to engage in dissertation, and to pursue the investigation of a difficult question, which had been started incidentally in the course of the debate, without ascertaining whether its solution was absolutely necessary to the original discussion. He regards the frequent change of members in the house of representatives as inimical to the acquisition of that knowledge, or the formation of those habits, so desirable in a deliberative assembly; and deprecates the custom into which they have fallen, of referring every thing to committees, as tending in effect to leave to the decision of a few, many questions which ought to be argued upon general principles, by the house at large. It is usual for ladies to attend when any interesting debate is expected; and the question of the admission of slavery into the Missouri, which has lately been agitated, attracts all the beauty and fashion to the senate. On this occasion, through what has been considered the over complaisance of the vice-president of the United States, who is the chairman of the senate, ladies have been admitted on the floor; but this is not to be allowed in future." Captain Basil Hall says, "the house of representatives at Washington is a splendid hall, of a semi-circular form, 96 feet

across, and 40 in height. Along its circumference are placed 14 marble columns, reaching to the vaulted dome, and fancifully tied together under the cornice by festoons of red damask. The gallery for the public, which is raised about 20 feet above the floor of the house, extends along the whole circuit behind these columns. In the centre below sits the speaker, from whose chair seven passages radiate to the circumference, whilst the members sit in concentric rows facing the speaker; the whole arrangement being not unlike in form to that of half of a spider's web. Every member has a snug, stuffed, comfortable arm-chair allotted to him; besides a writing-desk furnished with all the apparatus of paper, pens, and ink, and a drawer underneath, of which he keeps the key. This noble room, or more properly amphitheatre, is not well adapted for hearing. Were it actually a theatre, and the audience seated where the members are placed, while the actors addressed them from the coridor or open space behind the speaker's chair, along the diameter of the semi-circle, I dare say it might do very well; because the speaker, when addressing the house from the chair, was heard distinctly enough by the members. It was always difficult, however, for any member of the house to make himself heard. I spoke to one of them about this essential defect. He replied, that for once, in America, utility had been sacrificed to beauty; 'which,' said he, good-humouredly enough, 'you must do us the justice to say, is not often the fault of this country.' The most perfect decorum prevails at all times in the house; no coughing, no cheering, no hear! hear!—none of those undefinable, but significant sounds which are so irresistibly efficacious in modifying the debates of the house of commons. Every member of congress is permitted to speak at any length he pleases without interruption. I cannot say, however, that there is a correspondent degree of attention paid to what is said; for, independently of the reverberations of sound from the dome, or the waste of it in filling the intercolumniations, there are other sources of disturbance constantly going on, which drown a great part of what is said. Except when some remarkably good speaker has 'possession of the floor,' the members, instead of attending to what is spoken, are busied in conversation, in writing letters, rapping the sand off the wet ink with their knuckles, rustling the countless multitude of newspapers which deluge the house, locking or unlocking their drawers, or moving up and down the avenues which divide the ranges of seats, and kicking before them, at every step, printed reports, letter-covers, and other documents strewed on the floor. A couple of active little boys are always seen running to and fro with armfuls of papers, or carrying slips of writing from members to the chair, or from member to member. Whenever any one rises to speak, who, there is reason to infer, from experience, or from internal evidence, will be lengthy, one of these little Mercuries flies off for a glass of water, which he places on the orator's desk. A wide passage skirts the base of the columns, between each of which there stands a commodious sofa, on which the members, or such strangers as have the *entrée* granted them by the speaker, may lounge at their ease. Ladies are not allowed to come on the floor of the house, but only into the gallery. When, however, I chanced to go alone, I always found an excellent place behind the speaker's chair, along with the foreign ambassadors and other strangers. The reporters for the newspapers had a place assigned to them in this quarter of the house. The senate-chamber is similar in form to that of the hall of representatives, but of course it is much smaller; the diameter of the semicircle being only 75 feet."

Pittsburg.] Pittsburg, at the junction of the Monongbala and Alleghany rivers, contains 16,540 inhabitants. The streets are laid out in straight lines from the Monongbala to the Alleghany rivers, and crossed by others at right angles. It contains several places of worship; a large market-house; several banks; numerous taverns; large stores; yards for building steam and other boats; and several iron works. It is 1,100 miles from the confluence of the Ohio and Mississippi, and 2,000 miles from New Orleans. Steam-boats come up from New Orleans. Cincinnati the capital of the state Ohio, is situated on the richest part of the state, 7 miles below Little Miami, and 20 miles above the Great Miami, much of the country between these rivers is brought into cultivation; the land sells high, from 5 to 100 dollars per acre. The city is extensive, and the buildings are increasing. It is a fine-looking town, built on a ground rising to a great height from the river, the inhabitants amounting to 26,000. Cincinnati has several large woollen and cotton manufactures, and glass and iron works.

Newhaven.] Newhaven, the capital of Connecticut, in 1830, contained 10,653 souls. "There is nothing in Britain," says Duncan, "that bears any resemblance to a New England town, and it is not easy to convey an idea of its singular neatness. The houses are generally of wood, painted white, and decorated with Venetian blinds of a brilliant green. The solid frame-work of the walls is covered externally with thin planks, called by Americans, clapboards, which overlap each other from the eaves downward, and serve effectually to exclude rain. The roof is covered with shingles, which are thin slips of wood put on like slates, and painted of a dark blue. The buildings are, in general, about two stories in height; the door is decorated with a neat portico; and very frequently a projecting piazza, most grateful in hot weather, with benches under it, extends along the whole front of the house. Mouldings and minute decorations of various kinds are carried round the principal projections. A garden is not unfrequent behind, and a neat wooden railing in front, inclosing a grass-plot and a few trees. Such houses would soon look rusty and weather-beaten were they in our climate; but they enjoy here a purer atmosphere, and the smoke of coal-fire is unknown. The painting is renewed once a-year, which serves to preserve the wood for a long time. The churches, or meeting-houses, as they are more generally called, are, in the smaller towns, also of wood, and, with the addition of a steeple and a gilt weather-cock, resemble very much the other buildings. In the large towns, they are of brick or stone, but retain generally the green Venetian blinds upon the windows. The streets are wide, and run off, at right angles to each other, from a large open square covered with green turf, in the centre of the town: the churches, townhouse, and an inn or two, not unfrequently front this green. Gravel walks skirt many of the streets, and occasionally rows of limes or poplars. The agreeable succession of gardens, grass-plots, trees, foot-walks, and buildings, gives an air of rural quietness to the town; and the open space which frequently intervenes between one house and another, prevents much of the danger which would otherwise arise from fire. Every thing betokens an unusual share of homely simplicity and comfort, and the absence at once of great riches and of great poverty. Newhaven possesses most of the distinctive peculiarities which I have now noticed, but combines with them much of the compactness, durability, and bustle which we usually consider inseparable from a town. The churches and a great many of the dwelling-houses are of brick, a few

even of stone, and two or three of the streets are very closely built. The numerous buildings also of Yale college, all of brick, and constructed with regularity and neatness, complete its claims to superiority."

Louisville.] Louisville is a large town in Kentucky, at the head of the falls of the Ohio. Boats unload here for the back-country, and take in pilots to govern the falls. It possesses manufactories, and has a considerable trade; and, except Cincinnati, is the best town in the western country It is 706 miles from Pittsburg, 600 from Wheeling, and 1400 from New Orleans. The river opposite Louisville is one mile wide.

AUTHORITIES.] Americans as they are. By the author of Austria as it is. 12mo, 1828; Bell's Letters from Upper Canada, 12mo, 1824; Buchanan's Sketches of the North American Indians, 8vo, 1824; Carey and Lea's American Atlas, 3d edition, Philadelphia, 1827; Carey and Lea's Geography, &c. 8vo, London, 1823; Chateaubriand's Travels in America and Italy, 2 vols., 8vo, London, 1828; Duncan's Travels through the United States and Canada, 2 vols., 12mo, 1823; Dwight's Travels in New England and New York, 4 vols., London, 1823; Grant's Memoirs of an American Lady, 2 vols., 3d edition, 1817; Hale's (Hon. Salma) History of the United States, 2d edition, London, 1827; Haliburton's Historical and Statistical Account of Nova Scotia, 2 vols., 8vo, Halifax, N. S. 1829; Hall's, Captain Basil, Travels in North America, 3 vols., roy. 12mo, 1829; Hall's, Lieutenant F., Travels in Canada and the United States, 8vo, 2d edition, 1819; Harris's Remarks made during a Tour through the United States, 12mo, 1821; Head's Forest Scenes and Incidents in North America, 12mo, 1829; Hodgson's Letters from North America, 2 vols., 8vo, 1824; Howison's Sketches of Upper Canada, 8vo, 2d edition, 1822; Humboldt's Personal Narrative, vol. vi., 2 parts, London, 1826; Irving's Sketch Book, 2 vols., 5th edition, 1821; Irving's Bracebridge Hall, 2 vols., 8vo, 1822; James's Account of an Expedition to the Rocky Mountains, 3 vols., 8vo, 1823; Jefferson's Notes on Virginia, 8vo, 1787; La Fayette en Amérique, 2 tomes, 8vo, Paris, 1829; Lambert's Travels through Canada and the United States, 3d edition, 2 vols., 8vo, 1816; Lewis and Clarke's Travels to the Source of the Missouri, 3 vols., 8vo, 1817; Mackenzie's Voyage from Montreal to the Frozen and Pacific Oceans, 4to, 1801; Mellish's Travels through the United States, 8vo, 1818; Morse's American Geography, 8vo, Elizabeth Town, U. S., 1789; North American Review; Notions of the Americans. By a Travelling Bachelor. 2 vols., 8vo, 1828; Philadelphia in 1824, 18mo, Philadelphia, 1824; Picture of New York, 18mo, New York, 1818; Talbot's Five Years' Residence in the Canadas, 2 vols., 8vo, 1824; Warden's Statistical Account of the United States, 3 vols., 8vo, 1819; Weld's Travels through North America, 4to, London, 1799; Wright's View of Society in America, 8vo, 1822.

UNEXPLORED TRACTS

OF

NORTH AMERICA.

Before proceeding to describe the countries known by the name of Central America, it will be proper to give a brief and connected description of those parts of the northern portion of this continent, which still remain in the hands of their original inhabitants, and which have not yet been distinctly treated under any other separate head.

The tract of country extending from Cape Mendocino, in N. lat. 40° 29′, and W. long. 124° 24′ 30″, to the shores of the Frozen sea, in N. lat. 70° 30′, or 2,080 British miles from N. to S., is still in great part a *terra incognita*. The medial inland extent of this region does not exceed 1,400 British miles. From the N.W. end of the Lake of the Woods, in N. lat. 49° 37′, and W. long. 94° 31′, to the port of Nootka, in N. lat. 49° 35′, and W. long. 126° 33′, the extent from E. to W., along the frontier of the United States, is 1,430 British miles. But, as strictly speaking, the port of Nootka is on the western shore of Quadra and Vancouver's island, which is separated on the east from the mainland by a strait called the gulf of Georgia, the extent from E. to W. will be diminished to 1,300 British miles. This extent gradually increases as the continent stretches farther to the W., till, between the parallels of 55° and 66°, it attains an extent of from 1,800 to 2,000 miles; from thence it gradually diminishes as it approaches the Icy sea, to 1,280 British miles, namely, from the Icy Cape, in N. lat. 70° 28′, and W. long. 160°, to W. long. 105°, or 5 degrees E. of the mouth of the Coppermine river, making a space of 55 degrees of longitude. The whole superficies of this tract may be estimated at 2,500,000 British square miles. It is bounded on the W. and N. by the Northern Pacific ocean and the Icy sea; on the E. by New Britain and Upper Canada; and on the S. by the territories of the United States, New Mexico, and New California.

This tract may be arranged under three divisions, namely: 1*st.* the interior tract, which lies immediately to the N. of the United States; 2*d.* the tract watered by the Lower Columbia; and 3*d.* the maritime coasts. Without entering into any minute geographical details concerning each of these divisions, a few general remarks are all that are meant to be offered here, as at present these regions possess very little political or commercial importance, and can excite but little interest in the minds of the generality of readers.

Northern Interior Division.] As to the first of these divisions, it is—as we have seen—neither a paradise nor an El Dorado; possessing little calculated to allure the cupidity of Europeans, it has been but very imperfectly explored, and that chiefly by Canadian hunters nearly as savage as

the natives themselves. The exploratory journals of Hearne and Mackenzie are the sole sources of any accurate information concerning it. The aspect of the country, especially towards the north, is dreary in the extreme, consisting of a confused assemblage of mountains, morasses, marshes, plains, and lakes. We have, in our account of New Britain, described part of this territory; but we are utterly ignorant of the physical aspect of the vast tract stretching west of the Rocky mountains, towards the peninsula of Alaska and Bhering's straits.

Rivers.] The chief rivers are the *Unjigah*, and the *Saskatchewine*. The former, also denominated *Mackenzie's River*, and very absurdly the *Slave River*, is a very large stream, having its remotest source in N. lat. 54° 24′, and 121° W. long., in a belt of high land to the west of the Rocky mountains, in a small lake two miles long, and 500 yards broad; and only 817 paces distant from another small lake, which is the source of a branch of the Columbia.[1] The Unjigah runs N.W. till it receives a large north-western branch, in N. lat. 55° 42′, and 123° W. long., denominated *Finlay's River*. Both branches are 200 yards wide at their confluence; and in its course N.E. to the Lake of the Hills, its general breadth is from 400 to 800 yards wide, abounding with beautiful scenery, on both sides interspersed with hills and lawns, groves of poplars, and enlivened with vast herds of elks on the uplands and of buffaloes on the plains. From the Lake of the Hills, it passes due north to the Slave Lake; and is from a mile to two leagues wide. Running through this latter lake, it pursues a N.W. course of 730 British miles, till in 70° N. lat. and 135° W. long., it enters the sea. In one part of its course, where the river is contracted to a breadth of 300 yards, the depth was 50 fathoms, or 200 feet. It receives many large streams after its egress from the Slave Lake, one of which, called the *River of the Mountain*, is half-a-mile wide and 12 fathoms deep. Its comparative course may be estimated at 1,700 British miles. From the reports of the natives, it appears that another large stream enters the Icy sea, considerably to the W. of the mouth of the Unjigah.

The Saskatchewine.] The Saskatchewine is another large river, which enters the Lake of Winipeg on the N.W., in N. lat. 53° 15′. It is composed of two large branches,—the northern and southern, both having their sources in the Rocky mountains,—the former in N. lat. 51° 30′, and W. long. 115°; and the latter in N. lat. 51° 30′, and W. long. 114°. They run separate courses, till, at the distance of 520 British miles from their respective sources, they unite in N. lat. 52° 45′, and W. long. 104° 45′. The confluent stream, after a course of 280 British miles, enters Lake Winipeg, in W. long. 100°, and N. lat. 53° 15′; thence issuing to the north, it falls into Hudson's bay, under the name of *Nelson's River*, after a farther course of 200 British miles, making a total of 1,000 British miles of a comparative course. From Lake Cedar, a little to the west of Winipeg Lake, the Saskatchewine is navigable for canoes, without a single rapid during the whole course to near its sources in the Rocky mountains. The immense quantities of earth and sand brought down by the Saskatchewine, has gradually filled up the Cedar Lake, for a space of 15 or 20 miles in diameter, so that in all probability it will soon be wholly filled up, and converted into a forest.

[1] By a strange misconception of Mackenzie's text, this distance of 817 paces between the source of the Unjigah and that of this branch of the Columbia, has been understood as signifying the height of this high level above the sea, by Pinkerton and other.

The Red River.] The next river of importance is the Red River, which, at 30 miles distance from its entrance into Lake Winipeg, is divided into two large branches,—one called the *Red River*, and the other the *Assinebòin River*, or *River of the Stone Indians*, a branch of the Sioux Indians. The former has its source immediately to the S. of that of the Missouri, in Red River Lake, in N. lat. 48°, and W. long. 95°. At 150 miles distance N.W. from its source, it is joined by a branch of equal magnitude from the S., called *Swan River*, rising in a belt of high land separating its source from those of the St Peter and Crow Rivers, N.W. branches of the Upper Missouri. The confluent stream runs 100 British miles in direct distance, farther north, till its junction with the Assineboin River, as above mentioned: so that the comparative course of the river previous to this junction is 250 British miles. The Assineboin, or western branch, rises in 51° 45′ N. lat. and 104° 30′ W. long.; and after a course of 150 British miles S.E., and 150 British miles almost due E., it joins the Red River. Both these streams are navigable to their source, and both have establishments belonging to the North-west Company settled on their banks.

Copper Mine River.] As to the Copper Mine River, discovered by Hearne, very little is known about it. Its mouth is stated by Hearne's chart to be in 73° 30′ N. lat., whilst by his journal it is said to be in 71° 46′. In the whole of his journey of 1,300 miles, he took but one single observation of latitude. His longitude of 119° W. and lat. of 71° 46′ N. have been reduced by Dalrymple, Arrowsmith, and all the chart makers, to 112° W. long. and 69° N. lat. It was reached on the 1st September, 1820, by the land-expedition to the North Sea, under captain Franklin, in lat. 65° N. long. 113° W., where it is two miles wide. By the Indian report it enters the sea in N. lat. 72° and W. long. 110°. Like Mackenzie, Hearne never applied the simple and obvious test of dipping his finger in the water to taste if it was salt, in order to ascertain if he was really at the mouth of the river.

Climate, &c.] The climate of this extensive tract is very severe. Beyond the latitude of 60° N. no trees are visible, except a few stunted ones; and scarcely any thing of surface that can be called earth. Yet barren and inhospitable as it is, it is inhabited by a people who are accustomed to the life it requires, and have abundance of rein-deer, which supply them with both food and clothing. These animals brouse on the produce of the hills, which produce a short curling moss growing on the sides of rocks, and on which the Indians subsist in times of famine. The climate is more moderate in the southern parts, especially in the vicinity of the Saskatchewine, Assineboin, and Red rivers. The chief tribes of Indians are the Chipewyans and Knistineaux, whose habits have been already described.

The whole of this country east of the Rocky mountains, and the upper course of the Unjigah, is still in possession of the natives, and may be regarded, in its present state, as a vast tract of hunting-ground, claimed as the exclusive property of the Hudson's bay company, under the grant of a royal charter, who would neither cultivate it themselves, nor allow others to do so, till of late, that they were induced to sell a large tract of it in the neighbourhood of the Red River and Lake Winipeg, for £30,000 sterling, to Lord Selkirk. This tract contains a surface of 114,000 British square miles, and is the best land in the whole territory.

MARITIME DISTRICT.] The next division we shall describe is that which

is commonly called the *North-west Coast* of America, comprehending the whole line of coast from 48°, 55′, and 125° W. long., as far as 65° 46′ N. lat. and 169° 15′ W. long. From thence, the American coast trends to N. lat. 70° 29′; beyond this point, its particular direction is unknown. Previous to the discoveries of the illustrious Cook, this extensive range of coast had not been explored. Some faint gleams of light, indeed, were thrown on this hitherto obscure subject by the Russians, who, having gradually extended their settlements to the east and north-east extremities of the Asiatic continent, discovered the great chain of the Aleutian islands, stretching from Kamtschatka to Cape Alaska—the western extremity of the peninsula of that name, and connecting the two continents. The straits separating the two continents were discovered by captain Behring, a Dane, employed by the Russian court, on a similar plan of discovery with that of Cook, in 1728. Through these straits he sailed as far north as N. lat. 67° 18′, without discovering the approximation of the American and Asiatic continents, which must be imputed to the fogs which he met in a region so notorious for mists. Perhaps no coast in the known world has been so accurately explored as that of the North-west coast of North America, by the successive labours of La Perouse, Dixon, Meares, Portlock, Quadra, Malaspina, Galiano, Valdes, Colnet, Vancouver, and Broughton. The whole extent of this coast north of the inlet of Fuca, is so studded with islands, and so broken with sounds, bays, and inlets, as to present no appearance of continuity. Its extent, from the entrance of *Fuca* to the head of *Cook's inlet*, is 1,200 British miles in direct distance. From thence the coast trends S.W. to *Cape Alaska*, the extreme western point of the peninsula of that name, and 1,200 British miles E. of Kamtschatka. The line of coast in this direction is 800 British miles. From Cape Alaska to the head of *Bristol Bay*, the coast turns to the N.E. for a space of 350 British miles. From thence it bends N.W. for 150 British miles, and then runs almost due N. as far as the head of *Norton Sound*, 400 miles in direct distance. Thence its general direction is N.W. to *Cape Prince of Wales*, the western extremity of North America, 160 British miles further in direct distance; making a total of 3,060 British miles, exclusive of the windings of the coast. Beyond Cape Prince of Wales, the coast bends to the N.E. as far as the *Icy Cape*, in 70° 29′ N. lat. and W. long. 160°, a distance of 600 British miles. Allowing the coast to run nearly in a line to the supposed mouth of *Mackenzie's river*, the longitudinal extent will amount to about 25 degrees of longitude, which, in the parallel of 70° N. lat., make a space of about 600 British miles. From this point to 5 degrees E. of the mouth of the *Copper Mine river*, is a space of 30 degrees more, or upwards of 700 British miles; making a total of 1,900 British miles of line of sea-coast, from Cape Prince of Wales, in Behring's Straits, round the Icy Cape, to the point of longitude last mentioned. E. of the Icy Cape the coast has been explored by captain Beechy for 120 miles, or within 200 miles of the most western point of Franklin's expedition from the mouth of Mackenzie's river, so that only 200 miles between these points remain to be explored, of the whole American coast between the Icy Cape of captain Cook, and the mouth of the Copper Mine river of Hearne.

The Russians claimed all the coast as theirs, from 59° to 67° N. lat; and even, by an ukase of the emperor Paul, in 1800, all the coast N. of the parallel of 55°, was declared an integral part of the Russian empire, and included in the government of Irkutsk, under the pompous designation of

Russian America, while by subsequent ukases this claim was carried to the 51° of latitude. By treaty of 1825, the boundary-line betwixt the Russian and British possessions in this quarter is declared to run from Demarcation Point, on the coast of the Icy ocean, to Mount St Elias, near the Pacific. But from the latter point to the S. extremity of Prince of Wales' Island, the whole coast is declared to belong to Russia. From 67° to 64° 10', along the eastern shore of Behring's straits, the Russian settlements are nothing but huts frequented by Siberian hunters. The principal posts, reckoning from N. to S. along this district, are *Kigiltach*, *Leglelachtoke*, *Tugulin*, *Netschick*, *Tschinigriun*, *Chibalech*, *Topar*, *Pintepala*, *Agulichan*, *Chavani*, and *Nugran*, near Cape Rodney. These habitations of the American natives, are from 90 to 120 miles distant from the huts of the Tschoutskis of the Asiatic continent. Behring's straits, which separates them, is filled with desert islands, the most northern of which is called *Imaglin*. South of Norton Sound, to Cape Malowodan, (Littlewater,) there are no Russian establishments, but there are a great number of huts belonging to the natives, collected together along the shore, between 63° 20' and 60° 5' N. lat. Bristol bay of captain Cook, on the N. of the peninsula of Alashka, is called by the Russians *Kamisczkaia Guba*. They preserve none of the British names given by Cook and Vancouver, in their charts, N. of 55° N. lat.

From Bristol bay to New Cornwall, the coast is inhabited by five tribes, forming as many great territorial divisions, on the coast of what is called Russian America; their names are, the *Koniagi*, *Kenayzi*, *Tshugatschi*, *Ugalachmiuti*, and *Koliugi*. The most northern part of the peninsula of Alashka, and the isle of Kodiak, belongs to the Koniagi. A great inland lake, more than 80 miles long, by 36 miles broad, communicates with Bristol bay, by means of the river *Igtschiagick*. There are two forts and several factories on the island of *Kodiak*, or *Kightack*, and the small adjacent islands.—The Kenayzi inhabit the western coast of Cook's Inlet, or the Kenayskaia Guba. The Rada factory, visited by Vancouver, is situated here, in N. lat. 61° 8'; and notwithstanding the rigour of the climate, grain thrives well on the banks of Cook's river.—The Tschutgatski inhabit the coast between Cook's Inlet and the head of Prince William's Sound, (Tshugatskaia Guba.) There are three small factories, and three small forts, in this district,—fort Alexander, near the mouth of Port Chatham,—the forts of the Tuk's Island, (Green Island of Vancouver,)—and Tchalca, (Hinchinbrook Island.) The Ugalachmiuti extend from Prince William's Sound to Behring's bay (Bay of Jackutal.) The factory of St Simon is near Cape Suckling, (Cape Elie of the Russians.)—The Koliugi inhabit the mountainous country of New Norfolk and the northern part of New Cornwall. The proximity of mountains covered with eternal snow, and the extent of the American continent in the latitude of 58°, render the climate of this part of New Norfolk, and the country of Ugalachmiuti, excessively cold and inimical to the progress of vegetation. A mountainous belt runs along the whole coast from the head of Cook's Inlet in N. lat. 60°, to the S.E. point of the gulf of Georgia, in N. lat. 49°, where this belt joins the chain that traverse the district of the Lower Columbia. The most conspicuous summits of this chain are *Mount St Elias*, visible 60 leagues distance on sea; and *Mount Fairweather*.

The N.W. coast, to the S.E. of the Russian establishments, belongs to the United States, and is denominated by the different appellations of *New Hanover*, *New Georgia*, and *New Albion*.—Off the coast of New Georgia.

and separated from it by the gulf of the same name, is the large island of *Quadra*, or *Vancouver*, extending 220 B. miles in length from the S.E. point of the inlet of Juan de Fuca, to Queen Charlotte's Sound on the N.W., which separates it from Calvert's island, and containing a surface of more than 14,000 B. square miles.—The channel of *Tasis* separates this great island from the small island of *Yucuatl*, named *Nootka* by Cook and succeeding navigators; though this latter appellation is unknown to the natives, who have no word in their language similar to Nootka, excepting Noutchi, which signifies a mountain. This small island is about 20 miles broad, and contains, on its eastern side, the port of Nootka, or Yucuatl, in W. long. 126° 35′, and N. lat. 49° 35′ 10″. The climate of Nootka, and the coast in its vicinity, is remarkably mild; and though in the same parallel with the mouth of the St Lawrence, the smallest streams are not frozen till January. The natives, like those of the northern coast of Norway, are almost strangers to the noise of thunder. All European vegetables were found upon trial to succeed well; but maize and wheat, from too great luxuriance of vegetation, never ripened. The hills are covered with pines, oaks, cypresses, rose-bushes, vaccinium, and romedes. The trees are of vigorous growth and great size; and among the rocks and borders of the woods, are strawberry plants, raspberries, currants, and gooseberry-bushes, all in a flourishing state. The principal animals are racoons, martins, and squirrels. Birds are not numerous, but the true humming-bird was observed. They are, besides, uncommonly shy, from their being continually harassed by the natives, who take them for food, and use their feahters as ornaments. Fish are still scarcer than birds. The natives are in general rather below the middle size, but plump in their persons though not muscular; and the general appearance of the females is similar to that of the males. Their bodies are covered with red paint; but their faces are ornamented with a variety of colours, as black, a bright red, and white, which last gives them a ghastly appearance. Though seemingly docile, courteous, and good-natured, yet they are quick in resenting injuries.—Beyond the island of Quadra, to the N.W., is the entrance of *Queen Charlotte's sound*, communicating with the coast by a great number of inlets, bays, and islands. These last, denominated *Queen Charlotte's islands*, extend from 51° 42′ to 54° 18′ N. lat., and from 129° 54′ to 133° 18′ W. long., and are named *Washington isles*, by American navigators. *Dixon's inlet* separates these islands on the N.W. from the archipelago of the Prince of Wales. The principal island, denominated *Prince of Wales island*, by Vancouver, and *Isla de Ulloa*, by the Spaniards, is the most western of the group, and of large extent. Port Buccarelli, on its western coast, is a fine haven, surrounded by seven volcanoes, from the summit of which are continually thrown up flames and ashes. This port lies in 55° 24′ N. lat. Immediately to the N., and separated from them by a strait or entrance, are *King George's islands*, and the *Archipelago of Pitt*. At the N.E. extremity of this group, *Cross Sound* penetrates far into the continent.

The whole population of the N.W. coast, together with its islands, from the entrance of Juan de Fuca to Cross Sound, is supposed not to exceed 10,000 persons. At the entrance of Prince William's sound are three small islands, denominated *Montague*, *Hinchinbrooke*, and *Kay's islands*.—West of Cook's inlet, a large cluster of islands stretches along the coast of America, and that of the peninsula of Alaska, as far to the S.W. as 144 leagues E. of the peninsula of Kamtschatka. This cluster has been described in a previous chapter under the name of the *Aleutian islands*.

TRACT OF THE LOWER COLUMBIA.] The tract watered by the Lower Columbia and its numerous branches, is bounded by the Rocky mountains on the E.; the Upper Columbia, and the straits of Juan de Fuca on the N.; the North Pacific on the W.; and New California and Mexico on the S. It extends along the sea-coast, from Cape Mendocino, N. lat. 40° 29′, to Cape Flattery, in N. lat. 48° 55′, or 600 British miles of direct distance; but inland it extends from 660 to 700 British miles N. and S., namely, from N. lat. 40° 30′ to 50° 35′, along the crest of the Rocky mountains. Its longitudinal extent from E. to W. varies from 13 to 14 degrees, or from 600 to 650 British miles, namely, from 111° and 113° to 125° W. long.; but in the northern parts, the extent from E. to W. does not exceed 450 British miles, in the parallel of 48° N. lat., only 9 degrees of longitude intervening between the Rocky mountains and the eastern shore of the gulf of Georgia which separates the continent from Vancouver's Island. Its total superficies may be estimated at 400,000 British square miles. From Cape Mendocino to Cape Flattery, the coast runs in an uninterrupted line, unbroken by islands, sounds, or gulfs, and differing in this respect from all the N.W. coast, which, as far as Behring's Straits, is studded with islands, and broken with numerous creeks and sounds. The whole of this coast between the parallels of 38° and 48° has usually been denominated *New Albion*,—an appellation founded on the very inaccurate opinion, that Sir Francis Drake first discovered the N.W. coast of America, between the above latitudes. The real matter of fact is, that the coast of New California had been examined as far as N. lat. 43°, by Cabrillo, an eminent Spanish navigator, in 1542, or 36 years previous to Drake's voyage. To speak more correctly, the term *New Albion* ought to be restricted to that part of the coast which lies beyond the limits of Cabrillo's discoveries, namely, from Cape White of Martin de Aguilar, to the entrance of Juan de Fuca. The coast was again examined by Sebastian Viscayno, in 1602, to the mouth of a river, in 43° N. lat., and believed by Martin de Aguilar to be the western extremity of the straits of Anian.

The mouth of the Columbia was first discovered in 1775, by Quadra, commander of a Spanish voyage of discovery, who denominated it the entrance of *Heceta*, from the name of one of his colleagues, and the *River of Ascension.* The same coast was afterwards examined to the N. of Cape Orford, in N. lat. 43°, by the illustrious Cook, but without seeing the mouth of the Columbia. The appellation of the *Columbia* was first given to this river by the American navigator, Gray, not in memory of the great Columbus, but from the name of the sloop which he commanded. Its mouth was afterwards diligently explored by the Spanish navigators, Galeano and Valdez, in 1792; and the whole coast was minutely explored by captain Vancouver, who, as he was unable to discover any entrance between N. lat. 45° and the channel of Fuca, doubted of the existence of such a river as the Columbia, or the entrance of Heceta, though one of his own lieutenants sailed a considerable distance up the river without any suspicion of its being the Columbia.

The merit of first exploring the interior of this tract is due to the Americans, who, under captains Lewis and Clarke, crossed the Rocky mountains in 1805; and after a journey of nine weeks over tremendous mountains and precipices, arrived at the *Kooskooskee*, one of the tributary streams of the Columbia, on the 18th of October; and, sailing down the stream in canoes made by themselves, arrived at its mouth on the

7th of November, after a voyage of three weeks. The country has been since explored by other American parties, for the purpose of founding a colonial establishment at the mouth of the river, and exporting furs to Canton, so that both the interior and coast of this tract may be considered as now pretty well known. On the coast, the principal capes to the N. of Cape Mendocino are, capes *Orford*, *Gregory*, *Perpetua*, *Foulweather*, *Lookout*, *Point Adams*, *Cape Disappointment*, (both these last being on the north and south sides of the entrance of the Columbia,) and capes *Shoalwater* and *Flattery*. The openings or bays are those of the *Trinity*, *St George*, *Hayley's Bay*, at the mouth of the Columbia, and *Whitby's Bay*, and the entrance of *Fuca*, which terminates the coast.

Physical Features.] The general appearance of the country adjoining the sea is flat, but rising inland gradually into hills of moderate elevation; farther eastward, the prospect is bounded by a range of snowy mountains. The interior consists of extensive plains, or prairies without timber, extending 350 British miles from E. to W., on both sides of the Columbia, but gradually contracting in extent to the N., to a breadth of 200 miles. This district may be denominated the valley of the Columbia, as comprising all the open space between the Rocky mountains, and another range of mountains equally high, or perhaps higher, which runs parallel with the coast, as far as Cook's Inlet, in N. lat. 61° 29′, and W. long. 148° 43′. On the south of the Columbia, the country seems to be excessively mountainous and totally destitute of timber in that part which lies between the western Snowy range and the Rocky mountains. Between that range and the sea, timber is abundant, especially pines, some of which are said to be 300 feet high, and from 36 to 45 feet in circumference, frequently presenting a solid trunk for upwards of 170 feet without a single protruding branch. Between the mountains, the climate is unusually mild, and the prospect generally consists of extensive lawns crowned with luxuriant grass, or diversified with woods and flowers.

Climate, &c.] Captains Lewis and Clark wintered on the coast, from the 7th of November to the latter end of March; and though the weather was tempestuous and rainy, yet there was comparatively little snow, showing a remarkable difference of climate between the eastern and western coasts of America in the same parallel of latitude. The soil is excellent, being a light sandy loam, of very considerable depth in many places, and abundantly mixed with decayed vegetables. It is also excellent on the plains of the Columbia, above where it enters the ridge of Snowy mountains, in its passage to the sea. Quadrupeds and birds of every description abound; but they are comparatively scarce in the high country immediately W. of the Rocky mountains. Every animal common to the N.W. coast of America, is to be found here; and the grizzly bear, so formidable to the Indians, is by no means a scarce animal in this quarter.

Mountains.] The whole tract may be said to be intersected by three chains of mountains. The 1*st* range belongs to the great chain of the Rocky mountains, repeatedly mentioned when describing the United States. The most western range of this broad, elevated, and extensive chain, runs across the upper courses of the north and south branches of the Snake or Lewis river, barring all access by water, in that direction, to the coast, or to the Lower Columbia.[1]

[1] A vain attempt was made by the American expedition in 1805, to descend the N.

The 2d range runs parallel with the coast, at the direct distance of from 120 to 150 British miles inland, stretching from N.W. to S.E. and crossing the Columbia and Multnomah rivers, in the lower parts of their courses. How far to the S.E. this range extends, is unknown; but in all probability, it runs as far to the S.E. as N. lat. 38°, and W. long. 117°, where it joins a snowy range, which runs between the Californian mountains and the course of the Rio Colorado. Its precise elevation is unknown; but many of the peaks soar far above the line of perpetual snow, as *Mount Jefferson*, *Mount Hood*, *Mount Regnier*, *Mount St Helen*, and *Mount Baker*.

The 3d range seems to be the termination of the Californean range, to be afterwards described.

The Columbia.] The chief river is the *Columbia*, which receives into its expanded channel all the streams that water this country. This river was generally thought to be identical with the *Tacoutchee Tesse*, or *Great river*, discovered by Mackenzie, and the *Oregan*, or *River of the West*, of former geographers, but which is now ascertained to fall into the gulf of Quadra, on the Pacific, in 48° N. lat. Its source is unknown; but where Mackenzie struck it in N. lat. 54°, and W. long. 123°, it was 200 yards wide; and was joined a few miles farther down, by a much larger branch from the S.E. The great range of snow-clad mountains which runs parallel with the coast, prevents the Columbia from finding a direct course to the ocean; hence its direction is somewhat E. of S. from 54° to 46° N. lat., when its general course is almost due W. till it reaches the ocean, in N. lat. 46° 19′ 7″, and W. long. 125°. From the point where Mackenzie struck it, to its mouth, cannot be less than 1000 British miles of direct distance by water; and how much farther it is from thence to its source, is wholly unknown. Where it is joined by the *Lewis* river, its breadth is 960 yards when it is at the lowest in the latter end of autumn. Its general depth below the rapids is 30 feet; and its general breadth from one to three miles, till its junction with the *Multnomah*; its waters are clear, and not muddy like those of the Missouri, to which it is inferior in depth and rapidity. The tide flows up the river 183 miles, and within 7 miles of the great rapids. Large sloops may ascend with safety, as high as the tide-water; and vessels of 300 tons burthen reach the en-

branch of Lewis river. A similar attempt was made, in the latter end of 1811, to descend the S.E. branch of the same river, by a party of American hunters belonging to the New York fur-company, in order (as they imagined) to reach their establishment at the mouth of the Columbia, by a shorter, safer, and easier route, than that by the falls of the Missouri. After crossing, with great difficulty, several stupendous ridges of mountains, they at length reached the S.E. branch of Lewis river, formed by the junction of Henry's Fork with Mad river, down which they descended the stream about 400 miles to the N.W., in canoes, till they came to a place where the river was shut in by gloomy precipices at least 1000 feet of perpendicular height, and for 30 miles presenting a continued succession of falls, cascades, and rapids. They next came to a lofty range of snowy mountains, where the river forces a passage; and the banks being their only guide, they still kept as near to them as possible, by climbing over points of rocky projecting ridges, their canoes being now of no use, till, on the 3d of December, immense precipices, totally impassable, put an end to all hopes of following the margin of the stream, which—now reduced to the breadth of 40 yards—ran with incredible velocity, and so foamingly tumultuous, that even had the opposite bank been fit for their purpose, attempts at rafting would have been perfect madness. They now attempted to climb the mountains; but after ascending for half-a-day, they found, to their sorrow, that they were but half-way to the summit, and the snow already too deep for men in their emaciated state. They were therefore forced to return up the river, after a fatiguing march of 550 miles in 27 days, and seek the Columbia by a northern route; which they accomplished with great difficulty, after having lost several of their party, —some being drowned,—some having lost their senses, and gone raving mad,—some having perished with hunger,—whilst others were never heard of, having lost their way in the snow.

trance of the Multnomah, 125 miles from the mouth. The great falls of the Columbia, are 261 miles up the river; and their total height is 37 feet 8 inches, in a distance of 1200 yards. Six miles below these are the *Long Narrows*, where the stream is confined by high rocks to a breadth of 70 yards, for two miles; four miles farther down, the river is still more confined, and runs with vast velocity, with several dangerous rapids, causing another portage of three-fourths of a mile. Immediately below the falls, the high-water mark is 48 feet, and above them only 10 feet 4 inches from the surface of the water. So that in high water there is nothing but a rapid, where the salmon pass up without difficulty. Sixty-seven miles lower are the great rapids, where the descent is 23 feet in the course of one mile.

The Multnomah.] The *Multnomah* is the largest tributary stream of the Columbia, rising in N. lat. 41°, and W. long. 111°, near the sources of the Rio del Norte, Buenaventura, Platte and Arkansaw rivers. After a course of 660 British miles in direct distance N.W., it falls into the Columbia, in N. lat. 45° 30′, and W. long. 123°, 125 miles from the mouth, by the windings of the river. It has a very large volume of water, equal to about one-fourth of the volume of the Columbia, being 500 yards broad, and at least 30 feet deep. There are a number of falls and rapids in the lower part of its course; but it has not yet been explored so as to enable us to give any definite information of the country watered by its streams.

Lewis River.] *Lewis river*, or the *Kimooeenem*, is the second larger south-east branch of the Columbia. It is composed of two main branches, called the *North* and *South Forks*. Of these, the former rises in N. lat. 44°, and W. long. 112° 30′, immediately to the W. of the source of the Missouri, from which it is separated by a dividing ridge. The latter—which is much the larger branch—rises immediately to the west of the Jaune river, in N. lat. 42° 50′, and W. long. 111° 30′; and after a course of 420 British miles direct distance, is joined by the former branch; when, after a course of 160 miles farther, the confluent stream enters the Columbia, in N. lat. 46° 15′ 13″, and W. long. 118° 40′. At the confluence of these two streams, the Kimooeenem is 575 yards broad. As the upper course of this river is through a very mountainous country, all attempts to arrive at the Columbia, by way of sailing down the stream, have proved abortive.

Flat Head River.] The third great south-east branch of the Columbia, is *Flat Head river*, rising in N. lat. 45° 10′, and W. long. 111° 20′, in a mountainous ridge dividing it from the upper course of Wisdom river one of the head branches of the Missouri. After pursuing a N.W. course of 280 miles in direct distance, through the mountains, as far as 49° 30′ N. lat. and 116° W. long., it turns to the S.W.; and after running 160 miles in that direction, it enters the Columbia, 160 miles above the entrance of the Kimooeenem. This stream is also denominated *Clarke's river*. According to the reports of the Indians to Lewis and Clarke, there are falls on this river of 600 or 700 feet.—A great many other minor streams, some of them from 200 to 300 yards broad, fall into the Columbia on both sides, but chiefly from the S. and S.E.

This country is still in possession of the natives, who subsist chiefly by fishing, as there is a scarcity of hunting animals in the eastern division of this tract. To enumerate and describe the various tribes who inhabit this country, would occupy more space than our limits will permit, and would contribute very little to the instruction or amusement of the generality of

readers, as savage life presents few varieties of character. An attempt was made by the Americans, subsequent to the expedition of captains Lewis and Clarke, to make a settlement on the coast, on the south side of the Columbia, for the purposes of forming a commercial intercourse with China. This settlement, called *Astoria,* has however been lately abandoned, on account of the immense distance, and insuperable difficulties of the passage across the Rocky mountains. But what the Americans have been unable to accomplish, has been effected by the North-west company of Canadian traders, who have formed several establishments on the Columbia, and built *Fort George* and *Fort Vancouver,*—the former situated on the S. side of the river, and 8 miles from the sea,—and the latter 80 miles up the river from the former. Fort George is a square building, almost entirely composed of wood, surrounded with pallisades, and furnished with bastions. Eighty acres of land round the fort have been cleared, which produce fine crops of potatoes, and the cattle find plenty of pasture on the banks of the river. The hogs, which thrive remarkably well, have been brought from the Sandwich islands, and the horned cattle from California. The Indian village is a little westward of the fort, on a sandy beach, containing about 12 houses, each holding from 15 to 30 inmates. They are the *Chinnooks* of captain Lewis. There are no high mountains in the vicinity of the fort, and the country consists of sloping hills and regular outline. There are many islands in the river, some of which are from 2 to 3 miles in extent and would afford the best soil the Columbia possesses, for agricultural purposes, if it were not inundated two months annually. Towards the mouth of the river, the scenery is very tame, consisting of low alluvial land, covered with willows and rushes; but it improves as the river is ascended,—and the site of Fort Vancouver is much more interesting than that of Fort George. It is built in the centre of a very large and level prairie, already covered with fields of potatoes and pease; and the varied produce of the company's farm is annually increasing by seeds of plants and vegetables sent from Canada. The margins of the prairie abound in the beautiful *Phalangium esculentum,* a root so much used by the Indians as a substitute for bread; whilst the tubers of a species of *Sagittaria,* which grows on the marshy banks of the river, afford an agreeable substitute for potatoes. In the neighbouring woods are some of the choicest plants of which the N.W. coast can boast. The trade at these forts is wholly peltry, or furs and skins; and the company may remain in peaceable possession of their trade and settlements till such time as the tide of American population shall roll to the W. of the Rocky mountains, and plant the banks of the Columbia with villages and cities. In this case, the North-west company will be deprived of their commerce and forts, and the navigation of the Columbia will be possessed by the American states, who claim the extensive valley of that river as their own, to the 49th degree of N. lat., agreeable to the treaty of 1795, which fixed that parallel as the southern boundary of British America.

CENTRAL AMERICA.

MEXICO.

The Republic of Mexico comprises the whole of the vast territory formerly subject to the vice-royalty of New Spain. Previous to the publications of our own native historian, the elegant and learned Robertson, little more was known of this and the other Spanish-American colonies, than the history of their discovery and conquest; and even the information afforded by Robertson is comparatively scanty and imperfect. For 200 years, with the exception of Ulloa's travels and discourses, and the narratives of Bouger and Condamine, no satisfactory intelligence had been communicated to the world relating to any of the principal Spanish settlements. The scene, however, changed on the termination of the last and commencement of the present century, with the change of system adopted by the court of Spain in relation to its colonies, and the abandonment of that secrecy and concealment which it had hitherto preserved on every matter connected with its American possessions. Travellers were no longer refused admittance to her colonies, and their trade was comparatively thrown open to other nations. In consequence, much additional information has been given to the public by the various publications of Molina, Alcedo, Estalla, Depons, Antillon, and many others, and above all by Humboldt, who visited Spanish-America with the concurrence and approbation of the Spanish court, and whose work is yet our main authority in the geography of these regions. It must be premised, however, that Humboldt's geographical remarks only embrace that part of Mexico which lies to the south of the parallel of 24° N. lat; for beyond that, he confesses that he knows comparatively nothing, and has no more resources for determining the geography of what is commonly termed *New Mexico*, than major Rennel possessed for describing the interior of Africa. This deficiency, however, was in some measure supplied by Pike, an American officer, who traversed the country from Santa Fé, to Chihuahua, and thence east to Louisiana.

Boundaries and Extent.] The republic of Mexico, exclusively of Guatimala, extends from the 16th to the 40th parallel of northern latitude. To the N. and E. its limits are vague and questionable: and savannahs, resembling the deserts of Tartary, separate what are called the *provincias internas*, or back-settlements, from the territory of the United States. Its inland boundary on the N.E. is understood to commence at the mouth of the Sabine river in 29° 30′ N. lat. and 94° 15′ W. long. From this point the frontier line runs in a northern direction, up that stream to its source in the belt of high land which separates the valley of the Great Red river of Louisiana from the province of Texas; thence the boundary runs N.W. to the Red river; it then ascends the course of that stream to the 100th degree of W. longitude, and thence strikes off N to the Arkansaw, in the same meridian, up that river to its

source, from thence to the source of the Platte river, in 42° N. latitude, and thence almost due W., till it strike the coast of the Pacific at Cape Mendocino, in 40° 29′ N. lat. and 124° 24′ 3″ W., all S. of these points being included in Spanish America, agreeably to the treaty of 1821, which fixed the above boundary lines. For a long time the viceroys of Mexico affected to regard the whole N.W. coast of America as comprehended within their government, making New Spain border on Tartary and Greenland.[2] On the W. the shores of Mexico are washed by the Pacific; and on the S., the boundaries are the Pacific, and a line drawn from the port of Tehuantepec to the Bay of Honduras. The breadth of this country is very irregular. It is contracted to 130 British miles, in the isthmus of Tehuantepec; but gradually expands to the breadth of 280 British miles, between Acapulco and Vera Cruz. From thence, the isthmus of New Spain gradually swells in width, till it joins the main land of North America, in N. lat. 29°, increasing from 300 miles to 600, in the parallel of 20° N. lat.,—to 725 miles in the parallel of 26°, between the mouth of the Rio del Norte and the eastern shore of the gulf of California,—to upwards of 900 miles in the parallel of 28°,—and 1,200 miles in that of 30°. The greatest inland breadth is in 33° N. lat., namely, from 94° E. long. to 118″ W., or 1,400 British miles. From thence it gradually diminishes to 900 British miles, between the parallels of 37° and 41° N. lat., or from the hamlet of Taos, to Monterey; and from the Snowy mountains that divide the course of the Rio del Norte from the Arkansaw, to Cape Mendocino, on the Pacific ocean.

From the irregularity of its form, the sinuosity of its coast, and the deep indentings of its numerous gulfs and bays, it is impossible, without a very minute survey, to determine with precision the superficial contents of Mexico. Humboldt estimated the superficies as follows: Guatimala, including Nicaragua and Vera Paz, 26,152 square leagues,—the Viceroyalty of Mexico Proper, including the Californias, 51,289 square leagues,—the internal provinces, vulgarly denominated New Mexico, 67,189 square leages: total, 144,630 square leagues of 25 to the degree, or 1,108,998 B. square miles. It is to be observed, however, that Humboldt does not include in his statement the space occupied by the gulf of California, which embraces at least a space of 100,000 square miles, nor the vast tract of unexplored and unoccupied country to the N. of Sonora, and extending from the mouth of the Colorado, in the head of the Californian gulf, and from the mountains of New California, to the Snowy mountains. This tract is at least 630 B. miles from N. to S.; and from 600 to 840 from E. to W., for the greatest part of its extent northwards: so that the superficies cannot be much short of 300,000 B. square miles. Neither is the unexplored tract to the N.W. of the province of Texas, and extending S.W. from the upper valley of the Arkansaw to the range of Nambi and the Rio del Norte, containing at least 100,000 square miles, included in Humboldt's statement, which merely

[2] "The N.W. coast of America," says Humboldt, "furnishes to this day no other stable settlements than Russian and Spanish colonies. Before the inhabitants of the United States, in their progressive movement from east to west, could reach the shore between the latitude of 41° and 50°, that long separated the Spanish monks and the Siberian hunters, the latter had established themselves south of the river Columbia. Thus, in New California, the missionaries of San Francisco, men estimable for their morals and their agricultural activity, learnt with astonishment that Greek priests had arrived in their neighbourhood; and that two nations who inhabit the eastern and western extremities of Europe were become neighbours on a coast of America opposite to China."

embraces the political divisions and settlements of this region: so that the whole of the territory denominated Mexico, or New Spain, may be comprised, with Guatimala, under the following heads, namely:

	Square miles.
Political divisions and settlements,	1,108,998
Unexplored and unoccupied countries,	400,000
Gulf of California,	100,000
	1,608,998

Civil Divisions.] This vast, rich, and fertile territory presents the three following grand divisions: namely, the commandancy of Guatimala, forming the S.E. division,—the viceroyalty of Mexico, forming the central division,—and the northern or internal provinces, comprising New Mexico and the Californias, and which, in 1807, were divided into two commandancies, namely, the Eastern and Western internal provinces. The first grand division now forms an independent federal state. The civil division of the other districts, when Humboldt wrote, was as follows:

I. VICEROYALTY OF MEXICO PROPER.

Intendancies.	*Sq. leagues.*	*Sq. miles.*
1. Mexico,	5,927	45,440
2. La Puebla,	2,696	20,666.2
3. La Vera Cruz,	4.141	31,717.1
4. Oaxaca,	4,447	34,093.1
5. Merida,	5,977	45,823.1
6. Valladolid,	3,446	25,486
7. Guadalajara,	9,612	74,260.2
8. Zacatecas,	2,355	18,054.2
9. Guanaxuato,	911	6,984
10. San Louis Potosi, southern part,	2,357	18,266.1
10 Intendancies.	41,8[illegible]9	320,723

II. WESTERN INTERNAL PROVINCES.

	Sq. leagues.	*Sq miles.*
1. Sonora,	19,143	116,764
2. Durango,	16,873	129,126
3. New Mexico,	5,709	43,769
4. Californias, { New 2,125, Old 7,295, }	9,420	72,493
	51,145	392,452

III. EASTERN INTERNAL PROVINCES.

	Sq. leagues.	*Sq. miles.*
1. Cohahuila,	6,702	52,392
2. Texas,	10,948	83,902
3. Santander,	5,193	39,816
4. New Leon,	2,621	20,094
	25,461	196,204

Existing Division.] The republic of Mexico is presently composed of 20 confederated states, viz.:

Mexico,
Querstaro,
Mechoacan,
Guanaxuato,
Xalisco,
Zacatecas,
Cinaloa,
Sonora,
Old and New California,
New Mexico,
Chihuahua,
Cohahuila,
New Santander,
New Leon,
San Luis Potosi,
La Veracruz,
Tabasco,
Oaxaca,
La Puebla,
Yucatan.

The Texas has formed, since 1826, a small independent republic under the name of *Fredonia*.

CHAP. I.—HISTORY.

COLUMBUS discovered the coast of the continent, from Cape Gracias to Porto Bello, in 1502. In 1510, Vasco Nunez de Balboa founded the first Spanish settlement on the main-land, at Santa Maria, on the gulf of Darien. In 1516, Francisco Hernandez Cordova, an opulent planter in Cuba, sailed from that island with 120 men, and landed in the district of Yucatan. Here he intended to erect a fort, and settle a colony; but suffering himself to be surprised by the natives, he was slain by them, together with many of his men. Those that escaped returned to Cuba, and carrying with them tidings of the immense riches of the country, they excited the Spaniards to equip another expedition. Juan de Grijalva, having under his command three ships and a brigantine, sailed from Cuba in April, 1518, and arriving at Yucatan, avenged the defeat of Cordova. He then sailed westwards to the river Tabasco, where he landed, and took formal possession of the country in the name of Charles V., his master. The natives gazed with wonder at the ceremony; they accepted Grijalva's offer of peace, but treated the required submission with ridicule. Grijalva, however, instead of attacking them, traded peaceably with them for gold, which they had in plenty; and after having traversed the coast farther westward, returned to Cuba.

Cortez.] The success which had attended Grijalva's expedition prompted the Spaniards immediately to fit out a third and larger one of eleven vessels. The person chosen to command this expedition was Hernando, or Fernando Cortez. He was born in Spain, at Medellin in Estremadura; his father was Martin Cortez, and his mother Catallina Pizarro, a lady of noble extraction. Having been intended for one of the learned professions, he had passed two years a student in the university of Salamanca; but his active mind could not brook the confinement and monotony of a college, and, wishing particularly for some military employment, he embarked in the year 1504 for Hispaniola. He afterwards assisted in subduing the island of Cuba, and on this occasion acquired that reputation which procured for him the command of the expedition to Mexico. Cortez embarked at Cuba, in November 1518, and sailed to the Havannah; but the jealousy of Velasquez, the governor of Cuba, induced him to countermand the expedition, and send orders for his arrest. Cortez had the address to defeat his schemes, and, sailing from the Havannah, arrived at Cozumel, in the province of Yucatan. He here mustered his forces, and found them to consist of 508 soldiers, including 16 horsemen, with 10 small field pieces, and 109 seamen and mechanics, besides two ecclesiastics, John Diaz and Father Bartholomew de Olmedo, who acted as chaplains. From Cozumel, Cortez sailed on the 4th of March, 1519; and, soon after, landed at Tabasco. Here, according to Spanish writers, the natives collected an army to the number of 40,000, and attacked them with considerable vigour; but the superiority of the arms and discipline of the Spaniards, and the strange appearance of the horsemen, whom the natives imagined to be fierce monsters, half man and half beast, procured for the adventurers an easy victory. The cazique of Tabasco immediately sent an embassy to Cortez, with presents; and among other valuable articles, Cortez received 20 female slaves, one of them of uncommon beauty and accomplishments, who, being baptized by the name of Donna Maria, afterwards served in the capacity of interpreter, and proved of the greatest utility to her new lord.

Continuing their course westwards, the Spaniards arrived at St Juan de Ulua, where they were met by an embassy from the governor of the province, to whom Cortez made professions of the most friendly nature, but insisted upon being conducted to the emperor in person. The ambassadors assured him that their emperor never received foreigners into his presence, but added, that as this was an extraordinary case, they would send to know his pleasure, and, in the meantime, the Spaniards should be furnished with every necessary accommodation. On this occasion, the Spaniards first observed the method used by the Mexicans in making their despatches: they delineated on cotton cloth the figures of the Spaniards, their horses, their artillery, and every thing in appearance that was striking; and these paintings were despatched to their emperor to give him some idea of the strangers. Though the capital was above 180 miles distant, an answer was returned in a few days. Montezuma not only refused to admit the strangers to his presence, but sent them orders to leave his country. But this answer was accompanied with a rich conciliatory present to the Spanish general, which at once betrayed the monarch's wealth and fears, and excited the cupidity of the strangers. Cortez, in reply, declared it impossible for him to leave the country, consistently with his duty to his own sovereign, until he had been admitted into the presence of the emperor. "The firmness," says Dr Robertson, "with which Cortez adhered to his original proposal, should naturally have brought the negotiation between him and Montezuma to a speedy issue, as it seemed to leave the Mexican monarch no choice, but either to receive him with confidence as a friend, or to oppose him openly as an enemy. The latter was what might have been expected from a haughty prince in possession of extensive power. The Mexican empire at this period was at a pitch of grandeur to which no society ever attained in so short a period. Though it had subsisted, according to their own traditions, only 130 years, its dominion extended from the north to the south sea, over territories stretching, with some small interruption, above five hundred leagues from E. to W., and more than two hundred from N. to S., comprehending provinces. not inferior in fertility, population, and opulence, to any in the torrid zone. The people were warlike and enterprising; the authority of the monarch unbounded, and his revenues considerable. If, with the forces which might have been suddenly assembled in such an empire, Montezuma had fallen upon the Spaniards while encamped on a barren unhealthy coast, unsupported by any ally, without a place of retreat, and destitute of provisions, it seems to be impossible, even with all the advantages of their superior discipline and arms, that they could have stood the shock, and they must either have perished in such an unequal contest, or have abandoned the enterprise. As the power of Montezuma enabled him to take this spirited part, his own dispositions were such as seemed naturally to prompt him to it. Of all the princes who had swayed the Mexican sceptre, he was the most haughty, the most violent, and the most impatient of control. His subjects looked up to him with awe, and his enemies with terror. The former he governed with unexampled rigour, but they were impressed with such an opinion of his capacity as commanded their respect; and by many victories over the latter, he had spread far the dread of his arms, and had added several considerable provinces to his dominions. But, though his talents might be suited to the transactions of a state so imperfectly polished as the Mexican empire, and sufficient to conduct them while in their accustomed course, they were altogether inadequate to a conjuncture so ex-

traordinary, and did not qualify him either to judge with the discernment, or to act with the decision, requisite in such trying emergence. From the moment that the Spaniards appeared on his coast, he discovered symptoms of timidity and embarrassment. Instead of taking such resolutions as the consciousness of his own power, or the memory of his former exploits, might have inspired, he deliberated with an anxiety and hesitation which did not escape the notice of his meanest courtiers. The perplexity and discomposure of Montezuma's mind upon this occasion, as well as the general dismay of his subjects, were not owing wholly to the impression which the Spaniards had made by the novelty of their appearance and the terror of their arms. Its origin may be traced up to a more remote source. There was an opinion, if we may believe the earliest and most authentic Spanish historians, almost universal among the Americans, that some dreadful calamity was impending over their heads, from a race of formidable invaders, who should come from regions towards the rising sun, to overrun and desolate their country. Whether this disquieting apprehension flowed from the memory of some natural calamity which had afflicted that part of the globe, and impressed the minds of the inhabitants with superstitious fears and forebodings, or whether it was an imagination accidentally suggested by the astonishment which the first sight of a new race of men occasioned, it is impossible to determine. But, as the Mexicans were more prone to superstition than any people in the new world, they were more deeply affected by the appearance of the Spaniards, whom their credulity instantly represented as the instrument destined to bring about this fatal revolution which they dreaded. Under those circumstances, it ceases to be incredible that a handful of adventurers should alarm the monarch of a great empire, and all his subjects. Notwithstanding the influence of this impression, when the messenger arrived from the Spanish camp with an account that the leader of the strangers, adhering to his original demand, refused to obey the order enjoining him to leave the country, Montezuma assumed some degree of resolution, and in a transport of rage, natural to a fierce prince unaccustomed to meet with any opposition to his will, he threatened to sacrifice those presumptious men to his gods. But his doubts and fears quickly returned, and instead of issuing orders to carry his threats into execution, he again called his ministers to confer, and offer their advice. Feeble and temporising measures will always be the result, when men assemble to deliberate in a situation where they ought to act. The Mexican counsellors took no effectual measures for expelling such troublesome intruders, and were satisfied with issuing a more positive injunction, requiring them to leave the country; but this they preposterously accompanied with a present of such value, as proved a fresh inducement to remain there."

Cortez having now resolved on penetrating into the heart of the country either by forcible or pacific means; and in the meantime a fortunate event occurred in the arrival of a deputation from the cacique of Zempoalla with a proffer of friendship. The offer was eagerly accepted, and Cortez marched to the capital of his new ally; and thence proceeded to Quibislan, now called Vera Cruz. The cacique of that place was equally well-disposed towards the Spaniards, and assisted them in fortifying a position within his territories. While here, Cortez discovered that a part of his small army, influenced by some of the relations of the governor of Cuba, were resolved to leave him by stealth, and return to that island; he had power sufficient to over-rule their design, and, in order to discourage such projects for the future, he burnt his ships, as the best means of unit-

ing his men in the conquest of the country. Having fortified Vera Cruz, and left in it a garrison of 150 Spaniards, he then proceeded towards the city of Mexico, the seat of Montezuma's government; and on his march, sent ambassadors to the Tlascalans, a republic continually at war with Montezuma, offering to enter into an alliance with them, and asking permission to march through their territories. The Tlascalans at first were unwilling, either to enter into the alliance, or to grant the passage demanded; but after experiencing the dreadful effects of the superior arms and discipline of the Spaniards, they acceded to the terms proposed, and afterwards proved Cortez's most faithful allies. In September, 1519, they entered Tlascala, where Cortez had a palace allotted to him, which was sufficient not only for his own accommodation, but for that of his whole army.

Cortez remained at Tlascala twenty days, during which period he so far gained the confidence of the natives, that they readily engaged to accompany him in his march to Mexico. Wherever the Spaniards came, their leader manifested much religious zeal; he destroyed the idols with a bold and successful hand, and, converting the temples into churches, required the natives immediately to profess a religion which it was impossible they could comprehend. The simple Indians were terrified at such devastations committed with impunity on all that they accounted sacred; but the formidable arms of the Spaniards prevented them from expressing that indignation which they felt. At Tlascala, however, when a reformation in religion was proposed, the idea was rejected with haughty resolution. Cortez, little to the credit of his political sagacity, would here, as in other places, have proceeded to force; but father Bartolome declared that he was not without some scruples on the subject of establishing religion by force of arms, and Cortez deferred on this point to the authority of the ecclesiastic. While the Spaniards continued in this place, a dreadful eruption took place from Popocatepetl, one of the numerous volcanoes in this country, which was only about 24 miles from the city of Tlascala. The natives, though they could not be strangers to such convulsions, were still unacquainted with their true causes; they considered them as something preternatural, and as portending downfall and destruction to the surrounding nations. Resolved to profit by this circumstance, Diego de Ordaz and two soldiers, with a temerity which showed that they had very erroneous conceptions themselves of the real danger attending such eruptions, ascended the burning mountain, and, with a good fortune superior to their prudence, returned in safety. This rash journey was productive of the consequences which the Spaniards had calculated upon; it augmented the high opinion which the Indians had conceived of their prowess,—for they were convinced that no one, possessed of mere mortal powers, could approach in safety a combustion so direful, and it discovered to the Spaniards great quantities of saltpetre, by which they were enabled to recruit their stores of gunpowder, which, by this time, were much exhausted.

Montezuma now endeavoured to avert that destruction, by pacific measures, which he perceived he could hardly ward off by force. He sent another embassy to Cortez, inviting him to proceed in peace to the city of Mexico, his capital, and pointing out Cholula, one of his frontier towns, as the place whither the Spaniards were first to direct their march. This town—which the Tlascalans strongly advised him to avoid—was the holy city of the Mexicans, and the chief seat of their gods; and Montezuma

seems to have invited them thither, either from some hope that his gods would revenge themselves on the impious intruders, or from a belief that he could there cut them off with more certain success. However Cortez, being now joined by 6,000 Tlascalans, found himself at the head of a considerable army, and resolved to brave all danger. Without hinting his suspicions to Montezuma's ambassadors, he advanced towards Cholula, where he was received by the natives with great rejoicings, and apparent cordiality.[2] All his numerous allies were introduced along with him, except the Tlascalans, who, on account of some difference in religion, were forbidden to enter, but were suffered to encamp so near the town as to have it in their power to join the Spaniards whenever it should be requisite.

Several suspicious circumstances soon excited the attention of Cortez; and these indications being confirmed by intelligence received by Donna Marina and the Tlascalans, he resolved to anticipate the designs of the Mexicans. Accordingly, at a given signal, his troops rushed upon the city, and put 6000 of its inhabitants to the sword.

Cortez enters Mexico.] On the 29th of October, the Spaniards advanced towards Mexico, now distant 20 leagues. In descending from the mountains of Chalco, the vast plain of Mexico opened to their view. "When they first beheld this prospect, one of the most striking and beautiful on the face of the earth," says an elegant historian of these transactions; "when they observed fertile and cultivated fields stretching further than the eye could reach; when they saw a lake resembling the sea in extent, encompassed with large towns, and discovered the capital rising upon an island in the middle, adorned with its temples and turrets; the scene so far exceeded their imagination, that some believed the fanciful descriptions of romance were realized, and that its enchanted palaces and gilded domes were presented to their sight; others could hardly persuade themselves that this wonderful spectacle was any thing more than a dream. As they advanced, their doubts were removed, but their amazement increased. They were now fully satisfied that the country was rich beyond any conception which they had formed of it, and flattered themselves that at length they should obtain an ample recompense for all their services and sufferings. Hitherto they had met with no enemy to oppose their progress, though several circumstances occurred, which led them to suspect that some design was formed to surprise and cut them off. Many messengers arrived successively from Montezuma, permitting them one day to advance, requiring them on the next to retire, as his hopes or fears alternately prevailed; and so wonderful was this infatuation, which seems to be unaccountable on any supposition

[2] An old translation of Gomara's History, cited in the notes to 'Madoc,' gives the following description of their entrance into this city:—"The nexte day, in the morning, the Spaniards came to Chololla, and there came out near ten thousand Indians to receyve him, with their captaynes, in good order. Many of them presented unto him bread, foules, and roses; and every captayne, as he approached, welcomed Cortes, and then stood aside, that the rest in order mighte come unto him; and when he came entering into the citie, all the other citizens receyved him, marvelling to see such men and horses. After all this came out all the religious menne, as priests and ministers to the idols, who were many and straunge to behold, and all were clothed in white, lyke unto surplices, and hemmed with common threede. Some brought instruments of musicke like unto cornettes, others brought instruments made of bones; others an instrument like a ketel covered with skin; some brought chafing-dishes of coals with perfumes; others brought idols covered; and finally, they all came singing in their language, which was a terrible noyse, and drew neere Cortes and his company, sensing them with sweete smelles in their sensers. With this pomp and solemnitie which truely was great, they brought him into the citie."

but that of a superstitious dread of the Spaniards as beings of a superior nature, that Cortes was almost at the gates of the capital, before the monarch had determined whether to receive him as a friend, or to oppose him as enemy. But as no sign of open hostility appeared, the Spaniards, without regarding the fluctuations of Montezuma's sentiments, continued their march along the causeway which led to Mexico through the lake, with great circumspection and the strictest discipline, though without seeming to suspect the prince whom they were about to visit. When they drew near the city, about a thousand persons, who appeared to be of distinction, came forth to meet them, adorned with plumes, and clad in mantles of fine cotton. Each of these in his order passed by Cortez, and saluted him according to the mode deemed most respectful and submissive in their country. They announced the approach of Montezuma himself, and soon after his harbingers came in sight. There appeared first, 200 persons in a uniform dress, with large plumes of feathers, alike in fashion, marching two and two, in deep silence, barefooted, with their eyes fixed on the ground. These were followed by a company of higher rank, in their most showy apparel, in the midst of whom was Montezuma, in a chair or litter richly ornamented with gold, and feathers of various colours. Four of his principal favourites carried him on their shoulders; others supported a canopy of curious workmanship over his head. Before him marched three officers, with rods of gold in their hands, which they lifted up on high at certain intervals, and at that signal all the people bowed their heads, and hid their faces, as unworthy to look on so great a monarch. When he drew near, Cortez dismounted, advancing towards him with officious haste, and in a respectful posture. At the same time, Montezuma alighted from his chair, and, leaning on the arms of two of his near relations, approached with a slow and stately pace, his attendants covering the street with cotton cloths, that he might not touch the ground. Cortez accosted him with profound reverence, after the European fashion. He returned the salutation according to the mode of his country, by touching the earth with his hand, and then kissing it. This ceremony, the customary expression of veneration from inferiors toward those who were above them in rank, appeared such amazing condescension in a proud monarch, who scarcely deigned to consider the rest of mankind as of the same species with himself, that all his subjects firmly believed those persons, before whom he humbled himself in this manner, to be something more than human. Accordingly, as they marched through the crowd, the Spaniards frequently, and with much satisfaction, heard themselves denominated *Teules*, or divinities. Nothing material past in this first interview. Montezuma conducted Cortez to the quarters which he had prepared for his reception, and immediately took leave of him with a politeness not unworthy of a court more refined. 'You are now,' says he, 'with your brothers in your own house; refresh yourselves after your fatigue, and be happy until I return.' The place allotted to the Spaniards for their lodging, was a house built by the father of Montezuma. It was surrounded by a stone wall, with towers at proper distances, which served for defence as well as for ornament; and its apartments and courts were so large, as to accommodate both the Spaniards and their Indian allies. The first care of Cortez was to take precautions for his security, by planting the artillery so as to command the different avenues which led to it, by appointing a large division of his troops to be always on guard, and by posting sentinels at proper stations, with injunctions to observe the same vigilant discipline as if they were within sight of an enemy's camp. In the

evening, Montezuma returned to visit his guests, with the same pomp as in their first interview, and brought presents of such value, not only to Cortez and his officers, but even to the private men, as proved the liberality of the monarch to be suitable to the opulence of his kingdom. A long conference ensued, in which Cortez learned what was the opinion of Montezuma with respect to the Spaniards. It was an established tradition, he told him, among the Mexicans, that their ancestors came originally from a remote region, and conquered the province subject to his dominion; that after they were settled there, the great captain who conducted this colony returned to his own country, promising that at some future period his descendants should visit them, assume the government, and reform their constitution and laws; that, from what he had heard and seen of Cortez and his followers, he was convinced that they were the very persons whose appearance the Mexican traditions and prophecies taught them to expect; that accordingly he had received them, not as strangers, but as relations of the same blood and parentage, and desired that they might consider themselves as masters in his dominions; for both himself and his subjects should be ready to comply with their will, and even to prevent their wishes. Cortez made a reply in his usual style, with respect to the dignity and power of his sovereign, and his intention in sending him into that country; artfully endeavouring so to frame his discourse, that it might coincide as much as possible with the idea which Montezuma had formed concerning the origin of the Spaniards. Next morning, Cortez and some of his principal attendants were admitted to a public audience of the emperor. The three subsequent days were employed in viewing the city; the appearance of which, so far superior in the order of its buildings, and the number of its inhabitants, to any place the Spaniards had beheld in America, and yet so little resembling the structure of an European city, filled them with surprise and admiration."

"The capital of Montezuma, the proper name of which was Tenochtitlan, was built on a group of islands in the midst of a lake which, at that period, occupied a considerable part of the valley of Mexico. It was founded in 1325. Its appearance in 1520 is thus described by Cortez himself, in a letter to the emperor Charles V.; 'The province in which the residence of this great lord, Montezuma, is situated, is circularly surrounded with elevated mountains, and intersected with precipices. The plain contains near seventy leagues in circumference, and in this plain are two lakes which fill nearly the whole valley; for the inhabitants sail in canoes for more than fifty leagues round. Of the two great lakes of the valley of Mexico, the one is fresh, and the other salt water. They are separated by a small range of mountains; these mountains rise in the middle of the plain, and the waters of the lakes mingle together in a strait between the hills and the high Cordillera. The numerous towns and villages constructed in both of the two lakes carry on their commerce by canoes, without touching the continent. The great city of Temixtitan (Tenochtitlan) is situated in the midst of the salt water lake, which has its tides like the sea; and from the city to the continent there are two leagues, whichever way we wish to enter. Four dikes lead to the city: they are made by the hand of man, and are of the breadth of two lances. The city is as large as Seville or Cordova. The streets—I merely speak of the principal ones—are very narrow and very large; some are half dry and half occupied by navigable canals, furnished with very well constructed wooden bridges, broad enough for ten men on horseback to pass at the same time. The market-place, twice as

large as that of Seville, is surrounded with an immense portico, under which are exposed for sale all sorts of merchandise, eatables, ornaments made of gold, silver, lead, pewter, precious stones, bones, shells, and feathers; delft ware, leather and spun cotton. We find hewn stone, tiles, and timber fit for building. There are lanes for game, others for roots and garden fruits; there are houses where barbers shave the head (with razors made of obsidian); and there are houses resembling our apothecary shops, where prepared medicines, unguents, and plasters are sold. The markets abound with so many things, that I am unable to name them all to your highness. To avoid confusion, every species of merchandise is sold in a separate lane; every thing is sold by the yard; but nothing has hitherto been seen to be weighed in the market. In the midst of the great square is a house which I shall call l'Audiencia, in which ten or twelve persons sit constantly for determining any disputes which may arise respecting the sale of goods. There are other persons who mix continually with the crowd, to see that a just price is asked. We have seen them break the false measures which they had seized from the merchants.'"

Cortez soon perceived how very critical his situation now was; an accident also, which happened about this time, convinced the Mexicans that the soldiers of Cortez were not, as they had hitherto considered them, invulnerable. While the officers of Montezuma were collecting the accustomed taxes near Vera Cruz, the governor of that fort advanced with some of his men to defend the Indians who were his allies, and who had refused to pay any tax. He defeated the Mexican general, but, in the encounter, several of the people were mortally wounded, and the body of one of them having fallen into the hands of the Mexicans, his head was immediately cut off and sent to court, and wherever it came it caused a great change in the opinions of people concerning the mighty strangers. Cortez perceiving that he was quickly losing the influence which he had so long maintained, resolved on a daring expedient as the only means of security; he seized on the person of Montezuma, and carried him to the Spanish quarters; whence he permitted him to issue only such orders as were agreeable to the Spaniards. Amongst others, he was compelled to order the general and his officers, who had insulted the colony at Vera Cruz, to appear in Mexico, where they were tried by a Spanish court-martial, and condemned to be burnt alive on a pile composed of the weapons collected in the royal magazine for the public defence. These indignities offered to the emperor, and the continual profanations committed by the Spaniards on the temples, and every part of the ancient established religion, roused the vassal princes of the empire to a sense of the injuries they were sustaining, and prompted them to join their forces, to take vengeance, if possible, on the invaders. Montezuma himself had acquired confidence sufficient to enable him to remonstrate with Cortez, and to inform him, that as the object of his mission had been for some time completed, and as he had obtained an answer to his demands sufficiently favourable, it was proper that he should think of returning to the king his master. Cortez seemed to admit the justice of the emperor's observations, and only requested time to equip a fleet proper to transport his army, as that in which it had arrived had been burnt. The time demanded was granted, and the emperor's servants were commanded to give what assistance they could to the Spaniards. In the meantime an event took place which gave a new turn to affairs.

The governor of Cuba, as has been already mentioned, after having given the command of the Mexican expedition to Cortez, wished to recall him.

Enraged at the little respect paid to his commands, Velasquez had recaurse to the court of Spain, and, notwithstanding the presents which had been despatched thither by Cortez, had influence sufficient to prevent him from being confirmed in the command in Mexico which he had taken upon himself, and was even authorized to force from him the government which he had usurped. He therefore fitted out a fleet of 11 ships and 7 small vessels, having on board 800 Spanish foot, 80 horse, and 12 pieces of cannon, and gave the command to Pamphilio de Narvaez; but the Spanish government sent several ecclesiastics and other officers along with Narvaez, to bring about a reconciliation, if possible, between the two commanders, and to prevent the danger which would necessarily accrue to the Spanish interest in those quarters from their animosity. While Cortez, by his dilatory measures, was endeavouring to gain time, Narvaez arrived upon the coast of Mexico. The governor who had been left at Vera Cruz was summoned to surrender; but, instead of complying with this demand, he sent those who had been employed to cite him, prisoners to Cortez. Narvaez nevertheless landed, and encamped near Zempaola. The ecclesiastics, who had been appointed by the Spanish government, in the meantime proceeded to Mexico. They did not succeed in the pacificatory object of their mission; Cortez found means to corrupt, not only the ecclesiastics themselves, but through them, the greater part of the soldiers and inferior officers of Narvaez. Leaving, therefore, in Mexico, 150 Spaniards, under the command of Pedro de Alverado, he marched towards the camp of Narvaez, and, trusting to the friends whom his gold had gained to his party, suddenly attacked it, and made Narvaez and his principal officers prisoners; the remainder threw down their arms, and by far the greater part of them voluntarily offered their services to him whom they had been sent to annihilate, and who thus found himself suddenly placed at the head of 1000 Spaniards.

Meanwhile, Alvarado conducted himself in his new office with all the insolence of deputed authority. A religious festival was to be celebrated in Mexico, in which it was usual for the nobles and common people to mix with freedom and mirth. Liberty had been obtained from Alvarado for the celebration of this festival; but, stimulated by the desire of plunder, under the old pretence of an intended conspiracy, the Spaniards suddenly fell upon the unsuspecting Mexicans, and put 2000 nobles to the sword. Exasperated by this unprovoked attack, the Mexicans ran to arms, and attacked the Spaniards. They were soon repulsed by the fire-arms and artillery; but had closely shut up the soldiers of Alvarado, who must soon have fallen victims to hunger, when the timely approach of Cortez, with 1000 foot and 100 horse, relieved them from their perilous situation. The Mexicans, however, had lost their veneration and fear of the strangers, and irritated afresh by the conduct of Cortez, they renewed their assault on the Spanish quarters; and although repulsed in every attack, yet, having cut off all communication with the surrounding country, the whole Spanish army was in the greatest danger of perishing by famine. In this emergency the emperor was brought forward upon the battlements, and forced to declare that his staying with the Spaniards was his own choice and not of restraint, that he was offended with his subjects for having taken up arms, and that he wished them to depart peaceably and leave the Spaniards unmolested. The Mexicans, convinced that this speech expressed not the sentiments of his own breast, but was dictated to him by others, answered it with a shower of arrows, and a general attack upon the Spanish quarters. Of the Spanish writers, some relate, that the subjects of

Montezuma shot at him intentionally, and killed him with their arrows; others affirm that he was wounded by accident; while the Mexicans, with at least as much appearance of probability, assert that he was killed by the Spaniards in their subsequent retreat, when they found that they could not carry him off alive. Cortez was now convinced, that nothing remained for him but to force his way through the surrounding Mexicans. Dividing the booty, therefore, which he had acquired, among his men, and choosing for the purpose a dark and tempestuous night, he marched out with profound silence, but had not advanced far on the causey, which led through the lake to Yacuba, when he was attacked on all sides; his rear-guard, consisting of 200 or 300 Spaniards, and 1000 Tlascalans, were surrounded and cut to pieces, and it was with much difficulty that Cortez conducted the rest of his army to the farther side of the lake. They were now on the western side of the lake, and without halting longer than was absolutely necessary, they directed their march towards Tlascala; but were surprised to behold from the summit of a pass where they soon afterwards arrived, an immense army of Mexicans waiting their descent into the valley below. This army, as the Spanish historians assert, consisted of 200,000 men; and Cortez could not avoid an engagement, as his way lay through the valley where they were encamped. He, therefore, descended to the charge, and though the resistance was for some time obstinate, the discipline and arms of the Spaniards, and the seizure of the imperial standard, obtained for them a complete victory and immense spoils. All but Cortez now thought only of abandoning a country to the conquest of which they believed themselves unequal. Cortez, however, continued to collect around him the forces of all those chiefs who had entered into his alliance, and, having subdued several small states on the frontiers, he turned his whole attention to the reduction of the city of Mexico, rightly judging, that, were it in his power, the submission of the whole empire would soon follow. Being joined by 300 Spaniards from Jamaica and Cuba, he resolved to construct several vessels, that he might command the lake and support his army while it made the attack on Mexico by land. These vessels he made the Indians carry in pieces over land to the lake of Mexico, where they were put together and launched, and on board of each he put several Spaniards and a field-piece. He now approached the city with his whole army, consisting of about 900 Europeans, 18 field-pieces, and a very large body of confederate Indians. Different stratagems were used on both sides, with various success. Cortez himself was once made prisoner, and was not rescued without considerable difficulty. At length the Spaniards prevailed. Guatimozin, who had been elected emperor after the death of Montezuma, was made prisoner, with all his chief nobles; and the Mexicans, without farther resistance, submitted in silence to the Spanish yoke. In this siege, the Spanish historians acknowledge that no less than 100,000 of the natives fell by the sword, besides those who perished by famine and various other causes. The wealth acquired by Cortez in this war, and the magnificent presents which he transmitted to the Spanish emperor, had sufficient influence to procure for him the confirmation of the command in Mexico, by the title of governor and captain-general.

Cortez proved himself a merciless oppressor of the conquered Indians. If an Indian was suspected of having concealed his wealth, the most exquisite tortures were made use of to extort from him the disclosure of the place of concealment. With this view, the captive monarch himself and his chief minister were put to the torture. In every district of the Mexi-

can empire the progress of the Spanish arms was traced in blood; but above all, the mines were made a source of destruction to the natives. Thousands of them, torn from their homes, and forced into the deadly caverns of a mine, perished through the unwholesomeness of their occupation, and excess of labour; and it was not till the country was almost become a desert by the destruction of its inhabitants, that the government of Old Spain began to think of restraining this licentious barbarity. Commissioners, at last, were sent from Spain, to inquire into the conduct of Cortez, but his rich presents silenced every inquirer. Again he was called to Spain to answer for his treatment of the natives; but the wealth which he carried along with him, procured him favour instead of punishment. He was indeed deprived of the civil power, but received magnificent grants of the finest parts of the empire, and a commission for making new discoveries and new conquests. He again departed for Mexico, and, at different times, fitted out expeditions for making discoveries in the Pacific. On these expeditions he lavished much treasure; but they were never attended with the expected success. Tired by so many disappointments, he returned to Old Spain, in the hope of being reimbursed for the expenses incurred by the several expeditions; but failing to bring with him his wonted presents, his representations were coldly listened to, and his grievances were never redressed. On the contrary, he was forbidden to return to Mexico, and was obliged to spend the remainder of his days at court in Old Spain, where he died on the 2d of December, 1547, in the 62d year of his age. His body was sent to Mexico, and there interred in the cathedral. The chain of Mexican colonial history terminates with the life and administration of this extraordinary man, whose story is one of all but supernatural interest.

From Cortez to the Revolution.] From 1535 to 1808, Mexico continued to be governed by viceroys nominated by the court of Spain. The most eminent of these was the count de Revillagegedo, whose administration during the last 20 years of the 18th century was wise and beneficent. Before entering on the history of the rise and progress of the Mexican revolution, it may be expedient to take a general view of the colonial system pursued by the old government.

Colonial System.] "Spain," says an able writer in the Quarterly Review, "formed her colonial establishments in America at that dark period which preceded by more than a century the date of the English plantations. The excitement which the incipient reformation of religion had created in the N. of Europe, was scarcely felt in Spain, or was suppressed by that horrible tribunal the inquisition, or counteracted by that strange mixture of superstition and chivalry which produced the crusades, and which had been kept alive in the Peninsula by the reiterated and ultimately successful efforts to extirpate the Moorish power. Their religion, and the feelings which it excited, constituted a species of knight-errantry, which led them to fight for the beauty of a mistress, the honour of St Jago, or the immaculate conception of the holy virgin, with equal pertinacity and ferocity. Imbued with such feelings to an intensity now scarcely conceivable, the expeditions to America were composed of soldiers, stimulated, in addition, by an ardent thirst for that gold in which the newly-discovered countries were represented to abound; they spread devastation wherever they marched, and inflicted on the simple and uncultivated natives, tortures and sufferings, differing little, except in duration, from those pains which the priests who accompanied them announced as awaiting the wretched victims in another world.

"As the Spaniards brought with them from Europe few or no females, they speedily formed connections with the wives or daughters of those whom they had sacrificed. Hence has arisen a race proud of the imagined dignity of their male ancestors, and uniting with it much of the apathy and want of sensibility which distinguished the aborigines of America. Spain became early aware of the kind of population which was thus scattered over its boundless dominions. It sent them troops of priests to continue among the emigrants, and to propagate among the natives, that blind submission in spiritual matters, which she fancied would equally secure civil dependence. Few of the colonists were allowed to carry arms; hence, after the lapse of more than a century, the settlers were so little prepared for defence, that they became the easy prey of those bands of sanguinary and lawless ruffians, known by the name of Buccaneers, who looked only to plunder, and thought of no permanent establishments.

"The same anxiety to retain subjection, which had induced the court of Spain to leave the colonies defenceless, was extended to every branch of policy. Not only were viceroys and other chief governors sent from Europe, but all the judges, supreme and subordinate—all the administrators of revenue and expenditure—the members of the municipal corporations—the officers of the police—the inquisitors and their inferiors or familiars, were nominated by Spain. Thus, whilst the natives were not likely to be called upon to exercise any public functions, they had no inducements, even if they had enjoyed the means of instruction, to qualify themselves for the discharge of the lowest public services in society. The laws were unknown to all but the Europeans who presided in the courts of judicature; and by the Americans were supposed to be strained or interpreted in such a way as to favour those natives of the peninsula who were settled amongst them.

"The only institutions they venerated were those of a superstitious nature. The only object to which they looked up with respect, was Spain and its monarch. The only subject of pride which they dwelt upon with complacency, was that they were Spaniards. They believed, for it had been artfully and sedulously impressed on their minds, that the king of Spain was the chief monarch of the universe, in whose dominions the sun never set; and that France, England, Italy, and the other countries of Europe, were tributaries to the nation of which they formed a part. The lowest of the creoles, if but a tenth part of the blood that circulated in their veins was of Spanish origin, would exclaim, *somos Espaniolcs*, with a tone and emphasis that bespoke a sense of the dignity which they imagined to be derived from that nation.

"The portions of literature and science that existed in the peninsula were very insignificant. From the reign of Charles V. down to the present day, whilst England, France, Germany, and even Italy, had been steadily advancing in every species of knowledge, and in every art that contributed to promote the comforts, the enjoyments, and the wealth of their several communities, the sluggish pace which Spain maintained, kept her at a constantly increasing distance behind them. Of the scanty portion of knowledge scattered in the peninsula, a few faint sparks alone have ever illuminated the gloom of their transatlantic dominions.

"The settlements were mostly formed in a warmer climate than the districts occupied by the English colonists. In such climates, the seashores are generally found to be unhealthy, and hence the thickest-peopled parts of the Spanish dominions were on the elevated plains, at a distance

from the sea. The cities of Mexico, Guadalaxara, Guanaxuato, Bogota, Quito, Cuzco, and St Jago, are in the interior of their respective provinces; and the communication between them and Europe was difficult, hazardous, and protracted, even without noticing the various impediments and restrictions which the European metropolis interposed to favour the commercial monopolies of a few of her favoured cities. The intercourse between the several provinces of America was so restricted and guarded, that any knowledge or discoveries originating in one, could scarcely be communicated to the others, and the commodities furnished by some, were not allowed to be supplied to their brother-colonists, who might require them.

"Such, with a few variations, and with slight exceptions, had been the condition of Spanish America from the first year of its settlement, till the moment when, by the treachery of France, and the folly of the junta of Spain, it was set loose from all existing government, and left to itself to construct, with such wretched materials as the country could furnish, the edifice of social society."

A lurking discontent at the conduct of the mother-country had long existed among the Mexican Creoles; and Spain, though conscious of the fact, had done nothing to remove it. The principal sources of this feeling of dissatisfaction amongst the Creoles have been already hinted at, namely, their exclusion from all offices of power and emolument in their own country, the checks imposed upon agricultural and manufacturing industry, and the commercial monopoly exercised by the parent state. The war with Great Britain, which had lasted with little interruption for more than 12 years, had but slightly and partially affected the commercial prosperity of the colonies, and latterly not at all. Neutrals sailing under double licenses from London and Madrid, carried on the commerce; and, where these could not be obtained, the necessities of the colonies had been amply supplied by a contraband trade, which, in time of war, the Spanish government were wholly unable to prevent. The restoration of peace revived the commercial monopoly of the mother-country in all its rigour, and nearly annihilated the trade of the colonies. Spain could not afford them a market for their productions, nor even supply them with vessels to carry it to Europe. Aware of the wide-spread spirit of disaffection in the colonies, the central junta of Spain promulgated three several decrees in their favour, in order to allay the rising ferment. The first decree, dated 22d January, 1809, declared that the Spanish colonies formed an integral part of the nation, possessing equal rights; and therefore that each viceroyalty should send one deputy to the sovereign body. A second decree, issued 22d May, 1809, announced the right of the colonies to send deputies to the cortes; and that the committee appointed to regulate the convocation of that assembly was to determine the proportion. A third decree of 1st January, 1810, recognized afresh the equal rights of the colonies, and gave orders for choosing supplementary deputies, from colonial natives resident in Spain, till the real members should arrive. A grievous error was, however, committed in apportioning the deputies for the supreme junta; for while more than 100 members were allowed for Spain, 24 only were allotted for America; and, though the elections in the peninsula were strictly popular, yet in the colonies the right was exclusively vested in the *cabildos*, or public corporations, the members of which were chiefly European Spaniards, who could not be said to represent the colonists at all, and who, though they had in reality been composed of Creoles, would have possessed little political influence in that assembly; for in any case where the inte-

rests of Spain and the colonies might seem to be in collision, what probability would there be that the American members—only 24 in number—should be able to turn the scale in favour of their constituents? In the declaration of equal rights, the Indians, Negroes, and Mestizoes, with all the other various shades of colour, were excluded; and the members were to be chosen only from among the whites, thus excluding five-sixths of the Mexican population from the exercise of these rights. Notwithstanding these pompous declarations of abstract rights, the regency which succeeded the central junta continued to treat the Americans on the old footing of dependent colonies. All persons were forbidden to land in any part of America, without a passport from the government at home, or from some of its agents abroad; and the viceroys, judges, captains-general, and other officers, were sent out as before, with the same powers and instructions as the old government had been wont to furnish to its servants.

But the transaction which made the deepest impression on the colonists, was the revocation of a decree which had been but lately passed in favour of their commerce. This decree, of 17th May, 1810, permitted the colonies to trade with foreign nations, in articles of their own soil or manufacture for which they could not find a market in Spain. The measure, however equitable and necessary, was contrary to the interests of the merchants of Cadiz; and the regency—which, in consequence of the disasters in the peninsula, was now shut up in Cadiz—though desirous to do something to satisfy the Americans on the one hand, were afraid of the mercantile junta of Cadiz, in whose power they were, on the other; and finally acted a most cowardly and impolitic part. The decree was privately printed, and secretly despatched, as they imagined, to all the colonies; but the thing soon transpired, and the mercantile junta of Cadiz—they for whom the olive was forbidden to grow in Mexico, and its vines had been rooted up—insisted on the instant repeal of an edict which would subvert their gainful monopoly. The regency, in the poverty of their spirit, as well as the weakness of their power, submitted to the disgrace of disowning their own act—declared by a public decree that it was surreptitious—ordered all copies of it to be burnt—and put their minister and secretary under arrest, as if they had forged the edict. Their persons were soon liberated; but the device was too shallow to blind the eyes of the public. This impolitic step, together with the news of the disasters of the Spanish arms—the complete dispersion of the central junta, and their flight to Cadiz—their consequent abdication of power and the erection of a regency, completely controlled by a mercantile junta detested throughout all Spanish America for its selfish opposition to the interests of the colonies—soon reached the ears of the discontented colonists. The arrest and deposition of the viceroy, Iturrigaray, in 1808, had divided the Mexicans into two parties. The favour shown by the central junta to the party who arrested him, converted the opposite party into determined enemies of Spain. He had been deposed for no other reason, but because he had proposed the measure of choosing a Mexican junta to govern New Spain, while the parent state was destitute of a political head. The European Spaniards were hostile to this scheme of the viceroy, as it involved the germ of future independence, and of the subversion of their power. Intoxicated with their success, therefore, in deposing the viceroy, they insulted the Creoles; and the situation of the latter had become intolerable, when intelligence arrived that the central junta had lavished its highest honours on their enemies, and ordered the removal of the archbishop, successor to the deposed

viceroy, who, though a European, was beloved by them for his moderation, and had invested the high court of justice, whom the Creoles considered as their most violent enemies, with the temporary government of the kingdom, until the arrival of the viceroy Venegas, nominated by the mercantile junta of Cadiz.

Hidalgo's Conspiracy.] In this state of public irritation, an extensive conspiracy was formed, the ringleaders of which were chiefly priests; but many lawyers and militia officers joined with them, and, what was most alarming of all, some regiments of militia. The most active and enterprising of the conspirators was a country vicar of the name of Hidalgo, who enjoyed a valuable living at Dolores, in the intendancy of Valladolid. He was a person of talents and information far superior to those of the clergy of New Spain, and was of course suspected of heresy, and accused before the inquisition; but he had either the good fortune or the address to remove the grounds of their jealousy. Hidalgo had thoroughly gained the affections of the Indians, whom he took great pains to enlighten; several manufactures had risen under his care; and he had even established a foundry of cannon, alleging the immense advantages that might accrue to the crown from it, there being a very rich copper-mine in the vicinity of his parish. On the 17th of September, 1810, Hidalgo assembled the Indians to a sermon, in which he expatiated on the tyranny of the Europeans, the state to which Spanish treachery had reduced the peninsula, and the danger of being delivered up to the French or English, who would assuredly extirpate the holy catholic religion. His eloquent harangue effected its purpose upon a people deeply imbued with superstition, and accustomed implicitly to submit to the nod of a priest. Hidalgo ended his sermon by calling the Indians to arms, and in an instant more than half the kingdom of Mexico was in a flame. The intendancy of Michoacan immediately recognized the orders of the insurgent chief; three regiments of veterans joined his standard; and Salamanca, with Valladolid, fell into his hands. Wherever he appeared, the Indians crowded to his standard; the wealthy town of Guanaxuato supplied him with 5,000,000 dollars; and the insurgents wanted nothing but discipline, and leaders of military skill, to complete their project. Venegas, who had lately arrived, in the meantime secured the city of Queretaro, and awed into submission the Creoles of the capital, by forming a camp of his troops without the walls. The governors of San Louis Potosi and Guadalajara armed the militia of the country; and, in order to avoid suspicion, even the wealthy Creoles of the principal cities supported the cause of the Spaniards. Hidalgo, with an army of 40,000 men, advanced to Toluca; while that of the viceroy fell back on Lerma. Another corps of insurgents in the meantime pushed through Axusco to Cuernavaca, and obtained possession of the western coast with the city of Acapulco. The main body of the royalist force had gone too far to the north, and nothing of this was known in the capital. Mexico was therefore placed in imminent danger. The populace, and a considerable part of the higher classes, hated the Spaniards; and Venegas had but a handful of men on whom he could rely. At this crisis he resorted to an expedient, which, however ridiculous it may appear in our eyes, was in reality the only thing which preserved New Spain from falling entirely into the hands of the insurgents. He prevailed on the archbishop and the inquisition to fulminate a sentence of excommunication against Hidalgo, and all his troops and abettors. Hidalgo,

himself a priest, easily persuaded his Indians that the excommunication would fall on the archbishop himself; but the expedient had the effect of quieting the capital. Hidalgo advanced to the pass of Las Cruzes, which he easily forced, though defended by a division of the royalists, and presented himself before the capital on the 1st of November. If Hidalgo had improved this juncture, Mexico must have been lost to Spain. But he wanted decision; and summoned the capital when he should have stormed it.. The summons was answered with contempt; and the next morning the rebel troops retired without making a further effort. The true cause of their retreat was the information which Hidalgo had received of the advantages which the main body of the viceregal troops had obtained in his rear. General Callejas, who commanded them, had taken the town of Dolores, the birth-place of the revolution, and put all the inhabitants to the sword. Hidalgo was destitute of military skill to secure his retreat, and watch the movements of the royalists; Callejas met him at Axusco, and having completely defeated him, directed his march to Guanaxuato, which he entered on the 25th of November, putting most of the inhabitants to death. Another corps of royalists, under general Cruz, entered Irapuato, where they repeated the same cruelties and horrors. Hidalgo's catastrophe was now at hand. He had just reached the internal provinces with a considerable body of troops which still remained faithful to him, when the governor of that part of the kingdom offered to treat with him. Hidalgo and his comrades incautiously presented themselves for a conference, but were immediately seized and put to death, at Saltillo, on the 21st of March, 1811. A month after this, a body of 12,000 insurgents were defeated near Queretaro.

Revolutionary movements.] The insurrection, however, was far from being quelled by the death of its authors. It seemed, on the contrary, like the hydra of Lerna, to acquire fresh strength from successive defeats, for no sooner was one rebel chief cut off, than another immediately arose in his stead. The whole Indian and Creole population had now risen in every part of Mexico, and formed detached corps which adopted the guerilla system of warfare, so admirably adapted for prolonging the horrors of internal warfare and the desolation of a country. The most conspicuous of these guerilla leaders were Rayon, a lawyer, and Morelos, a priest. They formed a junta, which held its sittings for some time at Zitaquaro, whereupon the royalist general Callejas took this town, and razed every building in it to the ground. Morelos, after several successful and indecisive actions with the royalists, and the destruction of the royal magazines of tobacco, captured Acapulco, and effectually cut off all communication between Mexico and Vera Cruz. Meanwhile, the junta was succeeded by a congress, which met at a place 40 leagues distant from Mexico, and framed and published a democratic constitution. Morelos was ultimately taken prisoner and shot, and the independent chiefs now acting without cordiality or concert, there ensued a state of complete anarchy, which is thus described by Mr Robinson:—"Subsequently to those events, the royalists gradually reconquered many of the revolted districts; placing garrisons in every town and village, to awe the people into obedience to the royal authority. In this manner, they succeeded in forming a chain of fortifications from north to south, cutting off the communication between the patriots of the eastern and western provinces, who still roamed through the country in formidable bodies, but without co-operation among themselves. The direction of these revolutionary bodies, thenceforward,

fell into the hands of the most illiterate of the Mexican population, men whose sole aim was power, that they might by its aid acquire wealth. Many of these people were, from common field-labourers, raised to the rank of colonels and brigadiers; their conduct became licentious and cruel in the extreme, and as several of them were daring and enterprising, they were equally dreaded by royalists and patriots. Men of education, principle, or talent, among the revolutionists, were no longer respected. Any attempts made by them to establish order were decried as tending to despotism; while they were insulted, their property was taken from them, under the plea that the public service required it; their lives were threatened; and they dared not even murmur against the decrees of their tyrannical oppressors. Thus, on the one side, terrified by the conduct of their own party, and, on the other, allured by the flattering offers of the royalists, they at length sought safety under the banners of Spain."

Mina.] Such was the posture of affairs when Xavier Mina, the nephew of the celebrated Espoz y Mina, landed at Galvezton, in November, 1816. On the 16th of April following, he pushed forward to a town called Soto la Marina, on the river Santander, and from thence took up his line of march for the interior at the head of only 308 men. In 32 days he effected a junction with the patriots at Sombrero; but after a brief and gallant career, this extraordinary youth fell into the hands of the royalists, and was shot as a traitor in the 28th year of his age.

Second revolution.] About the middle of 1820, accounts were received in Mexico of the revolution in Spain which followed the revolt of the army in the isle of Leon; and it was soon understood that orders had been sent to Apodaca, the viceroy, to proclaim the constitution. "But it appears," says captain Hall, "that Apodaca and some of the principal generals, acting probably under secret orders from the king, resolved to resist the establishment of the constitution. New levies of troops were made by the government to suppress any attempt to declare it; and the whole country was gradually and almost insensibly roused into military action. The chief obstacle, as it was thought by these leaders, to the success of their plan, was the presence of general Don N. Armigo, whose attachment to the cause of the constitution was too well known to admit a doubt of his supporting it. He was, therefore, dismissed from the command of the military division stationed between Mexico and Acapulco; and in his place, Don Augustin Iturbide was appointed; an officer who, during the former revolution, had adhered steadily to the interests of the king, though he was a native of Mexico. He had been privy to the secret project above alluded to, of forcibly resisting the proclamation of the constitution; and when he left Mexico in February, 1821, to supersede Armigo, he was implicitly confided in by the viceroy, who appointed him to escort half a million of dollars destined for embarkation at Acapulco. Iturbide, however, soon took possession of the money at a place called Iguala, about 120 miles from Mexico, and commenced the second Mexican revolution, by publishing a paper, wherein he proposed to the viceroy, that a new form of government should be established, independent of the mother country." On the 24th of February, 1821, Iturbide proposed to the patriot chiefs a new scheme of government; and on the 2d of March his army took an oath to enforce and maintain it. Things were in this state, when, in August, 1821, general O'Donoju arrived from Spain, vested with powers to supersede Apodaca. To the surprise of all parties, O'Donoju entered into Iturbide's views, and the two generals concerted together a

form of government for New Spain, in which it was provisioned that New Spain should be recognised as a sovereign and independent state, and that a cortes should be immediately elected for the purpose of framing a constitution. O'Donoju, however, died soon after his arrival. A struggle soon commenced between the Cortes and Iturbide; the former were desirous of reducing the standing army, while the latter used every effort to augment it. The result was, the elevation of Iturbide by the army to the imperial dignity, under the title of Augustin First. Iturbide did not long enjoy his power in tranquillity. Santana, the governor of Vera Cruz, unfurled the standard of the republic, and was joined by Victoria and Bravo; the partisans of Iturbide gradually deserted him, while the forces of the republican generals rapidly increased. In this state of things, Iturbide proposed to relieve the country of his presence, and congress recommended that he should be permitted to retire to some foreign country with a pension of 25,000 dollars. Immediately after Iturbide's departure, a new constitution was framed and promulgated by a new congress, and was sworn to on the 2d of February, 1824. But the tranquillity which ensued was again disturbed by the appearance of the ex-emperor, who contrived to land in disguise, on the 14th of July, at Soto la Marina. On his discovery he was seized, and it was determined to give immediate effect to a decree which had been passed in April, denouncing Iturbide as a traitor in case of his landing. He was accordingly shot on the evening of the 19th of July. At the first election of the chief magistrate, general Victoria was elected.

The most serious difficulty which the new government laboured under arose out of the exhausted state of the public finances. In August, 1824, a loan of 20,000,000 of dollars was contracted for with a London house; and a further loan of 16,000,000 was subsequently negotiated. On the 1st of January, 1825, Mr Canning communicated to all the foreign ministers at the English court, that the cabinet of his Britannic Majesty had come to the resolution of acknowledging the independence of the republics of Mexico and Colombia. Notwithstanding of these and subsequent measures, the tranquillity of this country is far from being perfectly secured. On the 30th of November, 1828, an insurrection broke out in the capital, and general Guerrero was invested with the presidency; but on the 4th of December, 1829, Bristamente, the vice-president of the republic, raised the standard of revolt, and Guerrero having abdicated, the government has remained ever since in the hands of Bristamente and his party. Congress has subsequently decreed the expulsion of all Spaniards from the soil of Mexico. In 1829, Spain sent an expedition from the Havannah against Mexico, but the attempt to reduce this country to its former dependence, was, as might well be expected, utterly vain and ridiculous.

To the enthusiasts in the cause of Spanish America, the recent turbulent history of Mexican affairs must occasion much pain. But what reason was there to anticipate a different result? Ages of unmitigated despotism had rolled over the colonies of Spain, in the course of which no means of education, and no facilities for intellectual culture, had been afforded. They held no communication with European nations; they were visited by no travellers; they were debarred from all participation in foreign commerce; political experience they had not; and abstract political knowledge it was impossible for them to obtain. To expect that in the short space of 20 years—beyond which time the actual revolutionary contest continued in no part of Spanish America—practical knowledge should

be acquired, and a capacity for self-government created, is more than the most sanguine would pretend. There is still a radical defect in the constitution of society in Mexico; public opinion is not yet felt, and a high tone of moral feeling is not yet discernible in it. To supply these deficiencies, we can only rely on the influence of time, general education, and the diffusion of Christian knowledge.

CHAP. II.—PHYSICAL FEATURES—MOUNTAINS—VOLCANOES—CAPES AND BAYS—RIVERS AND LAKES.

In a tract of country so extensive as that which forms our present subject, the natural appearances must be greatly diversified. We are yet, however, profoundly ignorant of by far the greatest part of the Mexican interior. After all the aids afforded by Humboldt, we know little or nothing of the interior of Guatimala; and we know about as little of the northern part of Mexico Proper, and the whole of New Mexico. In fact, Humboldt traversed but a very small portion of this immense surface; and he confesses that beyond 21° N. lat. he knew nothing, but from report, of the internal configuration of the surface. The physical aspect of New Spain—including in that term Guatimala—from the 16th to the 26th degree of N. lat. is a high table-land, bearing some resemblance in this respect to the southern peninsula of India. How far to the north of 26° N. lat. this elevated level extends, is not yet known. Beyond the 26th parallel the land is said to decline towards New Mexico, and the Rio del Norte on the N., and the Rio Colorado of California on the N.W.; and the town of Saltillo, 180 miles of horizontal distance from Durango, to the N.E., is situated on the eastern verge of the high table-land. This high level, therefore, is upwards of 1,000 British miles in length from S.E. to N.W., and probably extends much farther, while it insensibly declines in level. The breadth expands as the table-land extends to the N.W.; under the parallel of 26° its width from E. to W. is about 400 miles.[1]

[1] In the parallel of 19° N. lat., or that of the city of Mexico, the breadth of this high level, according to Humboldt's vertical projection of the country from Vera Cruz to Acapulco, is 60 marine leagues, or 210 miles, between the opposite points of Guchilaquo and Las Vigas,—the former being 8,000, and the latter 7,814 feet above the level of the sea; and the lowest place in this intervening track is the city of Puebla de los Angelos, which is 7,198 feet above the ocean-level. The highest part from Mexico to Vera Cruz occurs E. 30 miles of the former city, and is 10,540 feet high. The plain of Toluca, to the S.W. of Mexico, is 8,818 feet above the level of the sea; and the Cross of the Marquis, 20 miles south of Mexico, is 9,842 feet above the same level. The height of the track from Mexico to Guanaxuato, a direct distance of 48 geographical leagues, or 166 British miles N.W., is nearly similar,—the lowest place in Humboldt's vertical section of this track lying 5,766 feet above the level of the sea, and the highest, 8,818 feet above the same level. The table-land expands so much from Oaxaca to Durango, S.E. and N.W. along the shores of the Pacific, that the central plain preserves an elevation of 6,560 feet for more than 180 miles W. of Mexico; but after leaving the valley of Mexico towards the S.S.W., or the city of Acapulco, it never again attains this elevation. The descent is much more gradual towards Acapulco than towards Vera Cruz. From the Cross of the Marquis, the S.S.W. boundary of the valley of Mexico, to Cuernavaca, the descent is indeed rapid, being 4,709 feet in a journey of less than 25 miles; but from the latter place to the valley of Istlan, an equal distance, the descent is less rapid, being only 1,916 feet. From the valley of Istlan, to that of Mascala, the descent on a line of more than 60 miles, is only 261 feet. From Mascala to Chilpansingo, the ground rises 2,872 feet in the space of 28 British miles. From thence the road descends 1,306 feet in 14 miles. Thence it crosses a hill 520 feet in absolute height, and occupies two leagues in ascending and descending. From this summit to the low valley of Papagallo, the descent is 3,184 feet in the space of 20 miles,—the valley of Papagallo being only 627 feet above the level of the sea. From this to the valley of Peregrino is only 3 miles of direct distance, with a small dividing summit of 510 feet perpendicular. This

The difficulty of communication between the interior of Mexico and the opposite coasts will long prevent Mexico from becoming a great commercial or maritime power. But however difficult the communications are between the table-land and the sea-coasts, the case is otherwise on the table-land itself. Its declivity is so gentle, and so little interrupted by valleys, that as far as Durango in New Mexico, 500 miles N.N.W. from Mexico, the surface is constantly elevated at from 5,576 feet to 8,856 feet above the sea; Durango itself being 6,847 feet above the same level. Plains of a great extent, but of so uniform a surface, are here so approximated to one another, that they form but a single plain on the lengthened ridge of the Mexican cordillera. The declination towards the north is so gentle as not to be perceived; and carriages roll with comparative ease along the vast elevated table-land, as far as Santa Fé in New Mexico, a distance of at least 1,500 British miles. The eastern declivity of the cordillera is a continual and rapid descent; but the road to the western coast alternately ascends and descends through four remarkable longitudinal valleys.

Mountains.] As to the mountains of Mexico or New Spain, taken in its utmost latitude, it is in strict geography improper to denominate them a prolongation of the Andine chain of South America. So far is this from being the case, that long before the Andes have reached the isthmus of Panama, they have dwindled into inconsiderable hillocks; and in Veragua, the *Sierra de Canatagua* runs in an opposite direction to the Andes, as if to interrupt their extension into North America. In the Mexican province of Oaxaca, the chain occupies the centre of the isthmus, between the sources of Chimalapa and Huasecualco. Of this part of the chain, the *Cerro de Sinpualtepec* is said to be so elevated, that both the Atlantic and Pacific are visible from it. This extent of visual horizon would indicate an elevation of 7,700 feet above the sea. The same spectacle is said to be enjoyed at La Ginetta, 12 leagues from the port of Tehuantepec, on the road from Guatimala to Mexico. From 18½° to 21° N. lat. the cordillera stretches from south to north, and approaches the Atlantic. In the centre of the table-land, an elevated chain separates the valley of Mexico from the intendancy of Pueblo de Lo Angelos. Of this chain, the most elevated summits are the *Popoca-tepetl*, or the 'Mountain of Smoke,' a volcano covered with perpetual snow, its elevation being 17,735 feet above the level of the sea, and the *Istac-cihuatl*, or 'the White Woman,' having an altitude of 15,700 feet, according to Humboldt, who took its height, as well as that of the former mountain, geometrically.[2] If we only consider the elevation of their respective bases, the appearance of these mountains cannot be so majestic as that of the Alps of Switzerland or Italy:

last valley is 100 feet lower than that of Papagallo. The traveller has again to ascend 916 feet in the course of about 7 miles. From thence the road is pretty level for the space of 18 miles,—the difference not exceeding 160 feet, till we arrive at the heights which overlook Acapulco. The descent from thence to Acapulco is rapid, being 1,362 feet in the course of 10 miles. Going from Mexico to Vera Cruz, the traveller has to traverse a space of 207 British miles ere he can arrive at a valley whose bottom is less than 3,280 feet above the level of the sea, and where oaks cease to grow; whereas, on the Acapulco road, the distance is only about 60 British miles. From El Manzanillo, on the eastern crest of the table land, to Vera Cruz, the descent is rapid and laborious, being 7,921 feet in the space of 87 miles. It is this laborious and difficult descent which renders land-carriage so expensive between Mexico and Vera Cruz,—and between Vera Cruz and Acapulco on the Pacific coast,—and which prevents the flour of Mexico from competing in Europe with the flour of Philadelphia.

[2] According to Mr Sonninschmide, a German mineralogist, who ascended to its summit, and measured its height by the barometer, the elevation was 14,830 feet, or 870 feet lower than Humboldt's estimate.

for while these latter are elevated from 12,794 to 15,419 feet above the plains of Switzerland and Lombardy, the Popoca-tepetl is only 10,268 feet above the lowest level of the valley of Mexico, and 10,537 feet above Puebla de Los Angelos, from which places this mountain is nearly equidistant. But the proximity of Mexico to the Popoca-tepetl and Istaccihuatl greatly contributes to heighten the impression produced by these volcanic mountains,—the distance being less than one-half that of Berlin and Milan to the Alps. This, combined with the superior purity of a tropical and highly elevated atmosphere, compensates the comparative inferiority of height, viewed as excrescences from the plain. The contours of their summits, covered with eternal snows, appear so much the more distinct, as the air through which the eye receives the rays is more rarefied and transparent. The snow is of a most extraordinary brilliancy, particularly when it descends from a sky of which the blue is always deeper than that of the sky which we see in our plains in the temperate zones. The barometrical pressure of the air being only 23 inches, the extinction of light must be very trifling in an atmosphere so little condensed; and, therefore, the contours of these summits must be much more distinct when viewed from the elevated plain of Mexico, than when seen at the same distance from the level of the ocean. The *Nevado de Toluca* is another colossal summit, 22 miles to the S.W. of Mexico. It is elevated 15,156 feet above the level of the sea, though it is only 6,299 feet above the plain whence it springs. The *Cerro de Axusco*, 12 miles direct distance S.S.W. from Mexico, is 12,052 feet of absolute height, and 4,596 feet above the level of Tezcuco. The mean elevation of the whole range, of which these summits make a part, and which surround, as with a circular wall, the valley of Mexico, is, according to Humboldt, 9,842 feet of absolute elevation. The eastern chain which runs N. and S. along the eastern declivity of the table-land, towards the gulf of Mexico, presents the elevated summits of the *Citlal-tepetl*, or 'the Star Mountain,'—called *Orizava* or *Orizaba* in the maps,—and *Nauhcampa-tepetl*, or 'the Coffer of Perote.' The absolute height of the former is, according to Ferrer, 17,876 feet, and 17,387 feet, and the latter 13,514 feet above the level of the sea, according to Humboldt. The former is the most majestic summit in the viceroyalty of Mexico. Its shape is completely conical; it is visible from Vera Cruz, and is the first part of the Mexican continent that is seen by navigators. When viewed from Xalappa, 20 miles N.E. of direct distance, it appears much more lofty than the Popoca-tepetl, as seen from Mexico and La Puebla, being 13,054 feet higher than Xalappa. Nothing, however, is seen of it from Xalappa, but that part which is covered with perpetual snow. From the north-eastern part of the intendancy of Mexico, the chain assumes the name of *Sierra Madre;* and then leaving the eastern quarter, it runs N.W. to Guanaxuato. North of this city, it becomes of an extraordinary breadth,—dividing immediately into three branches, of which the most eastern runs in the direction of Charcas and Catorce, and is lost in the province of New Leon. The western branch proceeds to the N. of Guadalajara, and passing to the E. of Culiacan and Arispe, as far N. as the source of the Rio Gila, forms in its progress the mountains of *Primeria Alta*, celebrated for the gold washed down their sides. This western branch is denominated the ridge of *Topia* by Spanish writers; and from its western side, many lateral chains stretch S.W. to the gulf of California. The middle branch of the Sierra Madre, which may be viewed as the central chain of the

Mexican Alps, occupies the whole extent of the intendancy of Zacatecas, and stretches through Durango and New Biscay, as far as the Sierras de los Mimbros to the W. of the Rio del Norte. From thence it traverses New Mexico, till it meets with the Topian ridge on the west, and on the east with a snowy ridge that commences on the east of the Rio del Norte, in 31° N. lat., and running N., and then N.W., forms the boundary in that quarter between New Mexico and Louisiana. This termination of the Sierra Madre, in 41° N. lat., divides the rivers which flow towards the Pacific from those which discharge themselves into the Atlantic ocean. From this point, where the various branches meet, they again spread out to a great breadth, under the appellation of the *Stony mountains*, already described in our account of the United States. Another snowy range extends N.W. and S.E. between the lower courses of the Colorado and Buenaventura rivers, running parallel with the east coast of the gulf of California. Another chain, called the *Californian mountains*, commences near the S.E. point of the peninsula of that name, and runs in a N.W. course through the middle of the peninsula, and along the coast of the Pacific, as far as the mouth of the Columbia,—an extent of more than 1,500 miles. The elevation of this chain is inconsiderable, its highest part, the *Cerro de Gigante*, or 'Hill of the Giant,' not exceeding 4,920 feet in perpendicular height. The elevation of the Sierra Madre, beyond 21° N. lat., is unknown, Humboldt's measurements being all confined to the south of this parallel. Its height, however, must be great, as it enters into the region of eternal snow, and abounds with precipices of the most terrible aspect.[3] The other heights S. of 21° N. lat., exclusive of those already mentioned, are: the peak of *Tancitaro*, 10,198 feet of absolute height,—*El Jacal*, 10,249,—*Mamanchota*, 9,766,—the *Volcan de Colima*, 9,286,—and the *Volcan de Jorullo*, 4,267 feet. The prevailing geological feature of this mountain-system is porphyritic rock. The central plateau of Anahuac appears like an enormous porphyritic dyke, distinguished from the European porphyry by the constant presence of hornblende and the absence of quartz. Granite appears at Acapulco and in Oaxaca.

Volcanoes.] *Popoca-tepetl* and *Istacci-huatl* are usually denominated the *Volcanoes of La Puebla*, or *Mexico*, their summits being equally visible from both cities. The latter is an extinguished volcano, and no Indian tradition goes back to the time when it made its eruptions. The same is the case with the *Nevado de Toluca*, the *Peak of Orizaba*, and the volcano of *Tustla* in the intendancy of Vera Cruz. The greatest eruptions of *Orizaba* or *Orizava* were between the periods of 1545 and 1566; no appearances, however, of inflammation have been noticed since. The crater of Pepoca-tepetl is half a mile wide, but no eruptions of consequence have taken place since the time of Cortez. A mass of ashes and very dense vapours were observed, by Humboldt and Bonpland, to issue from

[3] Like too many of his philosophical associates, Humboldt is much addicted to system. Believing the doctrine of the gradual depression of the terrestrial surface from the equator to the poles, he thence drew the conclusion that the Popoca-tepetl is higher than any mountain of the temperate zone: as if, forsooth, we were intimately acquainted with all the varieties of surface on the earthy part of the terraqueous globe. Philosophers should be more guarded in their language, and less given to generalization. The Great White mountain, 1,500 British miles N. of the parallel of Mexico, is more elevated than the Popoca-tepetl, if Pike's measurement can be relied on as correct; and the peaks of the Himmalaya, which lie within the temperate zone, are much higher than any equatorial mountains with which we are acquainted. Even the plains of Quito, and the table-land of Mexico, elevated as they undoubtedly are, are not equal in this respect to the table-land of Tibet

this crater in January, 1804. The *Coffer of Perote*, though presenting nothing like the appearance of a crater on its summit, yet seems to have been an ancient volcano, from the traces of currents of lava still visible on its sides. The small volcano of *Tustla* is very active, producing frequent and violent eruptions. The last, which was very violent, took place in 1793; the roofs of the houses of Oaxaca, Vera Cruz, and Perote, were covered by it with volcanic ashes, and at Perote, which is distant 170 miles in a direct line, subterraneous noises were heard resembling discharges of heavy artillery. The volcano of *Colima* frequently emits smoke and ashes. The *Volcan de Jorullo* is of very recent origin. It sprung up in 1759, in the centre of a vast and beautiful plain celebrated for its fine plantations of cotton, in the intendancy of Valladolid, more than 100 miles from any sea-coast, and 126 miles from any active volcano. Its elevation is from 2,460 to 2,624 feet above the level of the sea. In the middle of this plain, basaltic cones appear, which are covered on their summits with evergreen oaks of a laurel and olive-foliage, intermingled with small palm-trees, forming, in their beautiful vegetation, a singular contrast with the aridity of the plain now laid waste by volcanic fire.[4] Although the subterranean fire seems to have lost its former violence, and the plain and the great volcano begin to be covered with vegetables, the ambient air is still heated to such a degree by the action of the small funnels or ovens, that the thermometer at a great distance from the surface, and in the shade, rises as high as 109° of Fahrenheit; and for many years after the first eruption, the plains of Jorullo, even at a great distance from the scene of

[4] Till the appearance of this volcano, fields cultivated with sugar-cane and indigo occupied the ground that lay between two small rivulets, and which was bounded by basaltic mountains, whose structure apparently indicates all this tract to have been, at a very remote period, convulsed with volcanoes. These fields, artificially wate ed, belonged to the plantation of San Pedro de Jorullo, one of the greatest and richest in the country. In June, 1759, a subterraneous noise was heard, and hollow sounds, accompanied by frequent earthquakes, in succession, for from 50 to 60 days. From the commencement of September, however, every thing seemed to announce a return and re-establishment of former tranquillity, when, in the night of the 28th of September, the horrible subterranean noise again commenced, and the affrighted Indians fled to the mountains. A tract of ground, of four square miles in extent, now rose up in the shape of a bladder, the edges of which were 39 feet above the level of the old plain, but rose progressively towards the centre to an elevation of 524 feet. Those who viewed this awful catastrophe from the mountains, beheld flames issuing forth, and fragments of burning rock thrown up from an extent of more than four square miles of country; and discerned through the thick cloud of ashes, illumined by the volcanic fire, the softened surface of the earth swelling up like an agitated sea. The two rivulets of Cuitamba and San Pedro were then seen to precipitate themselves into the burning chasms; and the decomposition of the water invigorated the flames, which were visible at Pascuaro, more than 40 miles distant. Eruptions of mud, and especially of stratified clay, enveloping balls of decomposed basaltes, in concentrical layers, seemed to indicate that subterraneous water greatly contributed to produce this extraordinary phenomenon. Thousands of small cones, from six to ten feet high, issued forth from the convulsed plain, each being a funnel, from which ascended a thick vapour to the height of from 33 to 49 feet. In many of them a subterranean sound was heard, as of boiling water. The heat of these ovens, though much diminished within these 15 years, (says Humboldt,) is still equal to 202° of Fahrenheit. In the midst of these ovens, six large masses, elevated from 1,312 to 1,640 feet perpendicular above the old level of the plain, sprung up from a chasm extending from N.N.E. to S.S.W. The most elevated of these stupendous masses is the great volcano of Jorullo, which burns continually, and has thrown up from the north side an immense quantity of scorified and basaltic lavas, containing fragments of primitive rock. These great eruptions of the central volcano continued till the month of February, 1760, or for the space of four months. In the following years they became gradually less frequent. The Indians, terrified at the horrible noises of this new volcano, abandoned at first all the villages within 20 or 25 miles of the plain of Jorullo; but became gradually familiarized to the awful spectacle; and, having returned to their cottages, advanced to the mountains bordering the plain, to admire the streams of fire issuing from an infinity of great and small volcanoes.

the explosion, were uninhabitable from the excessive heat. Similar subterranean noises were heard at Guanaxuato, in January, 1784. Earthquakes are frequent on the coast of the Pacific ocean, and in the environs of Mexico, though not attended with such desolating effects as in Peru and Quito. All these phenomena seem to indicate the existence of an active internal fire, between the parallels of 18° and 22°, which pierces from time to time through the crust of the globe, even at great distances from the sea-shore.

Capes.] The only capes worthy of remark in this extensive region are, *Cape St Lucas*, the S.E. point of the peninsula of California, in 22° 52′ 28″ N. lat., and 110° 45′ 38″ W. long., by the corrected observation of Mr Oltmanus; *Cape Corrientes*, the most western point of the isthmus of Mexico, in 20° 25′ 30″ N. lat., and 105° 34′ W. long.; and *Cape Mendocino* already mentioned.

Bays.] The chief bays or gulfs are those of *Tchuantepec*, and the large inland gulf of *California*. The first lies in 16° N. lat. on the Pacific. Between the head of this gulf, into which the river Chimalapa disembogues itself, and the mouth of the Huasecualco, is only 125 B. miles across. The gulf of California is a very large inland sea, stretching 880 B. miles from S.E. to N.W. or from the mouth of the El Rosario river, in N. lat. 22° 52′, to the mouth of the Rio de Colorada, in N. lat. 32° 50′. The entrance of this gulf, between cape St Lucas, the S.E. point of California, and the mouth of the El Rosario, on the continent, is 200 miles across; and from thence, as far as N. lat. 27°, the average breadth is from 120 to 150 miles; from thence to the head it seldom exceeds 60 miles. The printed maps of this gulf are sadly erroneous. The other bays are those of *San Blas*, *San Francisco*, and *Acapulco*, on the southern ocean; and in the gulf of Mexico, those of *St Bernard*, *St Joseph*, and *Galveston*, in the province of Texas.

Gulf of Mexico.] The gulf of Mexico washes the shores of Florida, Alabama, Mississippi, and Louisiana, on the side of the United States, and those of the Texas, New Santander, La Vera Cruz, Tescuaco, and Yucatan, on the side of Mexico and Guatemala. It extends between the 18th and 30th parallels of northern latitude, and is nearly of a circular form, but somewhat elongated from E. to W. In the latter directi[illegible] it is 1,150 miles long; in the transverse direction it is about 930. It opens in a S.E. direction, between the peninsula of Yucatan and Florida, or the capes Catoche and Sable, which are about 465 miles distant from each other. The island of Cuba divides this opening into two channels: the one to the S.W. communicating with the sea of the Antilles, and the other to the N.E. with the Atlantic, by means of the straits of Bahama or Florida. South from the mouth of the Rio del Norte, round about to the mouth of the Rio Alvarado, in 18° N. lat., an extent of 600 B. miles, this gulf does not present a single good port, as Vera Cruz is merely a bad anchorage amidst shallows. The Mexican coast may be considered as a sort of dyke, against which the waves, continually agitated by the trade-winds blowing from E. to W., throw up the sands carried by the violent motion. The rivers descending from the Sierra Madre, have also contributed to increase these sands, and the land is gaining on the sea. No vessels (says Humboldt) drawing more that 12½ inches water can pass over these sand-bars without danger of grounding. The Mississippi is the principal tributary of the gulf of Mexico, and carries down with it, besides its vast body of waters, a prodigious quantity of organic and unorganic debris. The town of New Orleans, near the mouth of this river, is the principal commercial station along the whole

gulf. . In the middle of the gulf the winds blow regularly from the N.E.; but they vary considerably on approaching the shore. From the Mississippi, along the Florida coast, the S.W. wind blows violently in the months of August, September, and October; the N. wind prevails during the other nine months. Between the Mississippi and San Bernardo, the wind generally blows in the morning from the S.E. or E.S.E., and in the evening from the S.W. Between Catoche and Campeachy the reigning wind, during a great part of the year, blows from the N.E.; but from the end of April to September, it comes from the opposite direction. The most remarkable current in the gulf, is that called the *Gulf-stream*, already described in our general remarks on physical geography.

Rivers.] Considering the extent of this country, its large rivers are not numerous.

Rio Grande del Norte.] The chief is the *Rio Bravo*, or *Rio Grande del Norte*. According to the large map of Lewis and Clarke's tract from the Missouri to the Pacific, the remotest sources of this river are two streams which rise in the great cordillera that separates the eastern from the western waters of North America, in 40° 12′ N. lat., and 111° 30′ W. long. immediately to the W. of the sources of the Big Horn, Platte, and Arkansaw rivers. The valley containing its sources is separated by another stupendous ridge on the N. from the head-waters of the great southern branch of Lewis' river; and on the W. by another range, which separates it from the sources of the Multnomah river, or great S.E. branch of the Columbia. These two streams run separate courses of 50 miles each, westward, till they unite and form the Rio del Norte. Thence turning to the S.E. it is augmented by several streams from the W.; and after a course of 120 miles in that direction, it is joined by a large stream from the N.E., called *Colter's river*, discovered by an American hunter of that name in 1807. Thence it runs 250 miles farther in the same direction, in a valley bounded on both sides by ranges of snowy mountains, as far as 38° N. lat., and 107° W. long., where it enters the province of New Mexico. Thence its course is due S. for 350 miles, to 33° N. lat., passing by the city of Santa Fe. Thence it directs its course generally to the S.E., through the province of Cohahuila, and after dividing the province of Texas from that of New Santander, it falls into the gulf of Mexico, in 25° 55′ N. lat., and 97° 26′ W. long., according to Humboldt. The comparative course of the Rio del Norte, is nearly 1,600 British miles, 540 of which are to the N.W. of Santa Fé. It cannot, however, be said to be a navigable river in any part of its course, owing to the mountains in the upper part of its course, and to sand-bars in the flat country; but small boats might ascend as far as Presidia de Rio Grande, in Cohahuila, a distance of 200 B. miles from the coast. Even in the mountains above Santa Fe, it affords water amply sufficient for canoe navigation. Nearly 180 miles above the Presidio de Rio Grande, it receives the *Puerco*, after a course of 320 miles S.E. from its source in the apex of the angle formed by the junction of the Sierra del San Sacramento with the mountains of Namhi, in 34° N. lat. Above 166 miles higher up, the Rio del Norte receives the *Rio Conchos*, after a course of 300 miles N.E. from the Sierra Madre. Where Pike crossed the Conchos it seemed to be as large as the Rio del Norte at the Passo. Like the Missouri, the Red river, and the Arkansaw, the Rio del Norte has its periodical floods, which commence in April, are at their height in the beginning of May, and fall towards the end of June. At Albuquerque, where Pike crossed it, 40 miles below Sante Fe, it is 400 yards wide and 3 feet

deep; and in the drought of summer, it may be forded as far as its junction with the Conchos. The Rio del Norte chiefly intersects a thinly peopled country. When population shall have advanced to its banks, it will acquire immense importance, especially if it shall then—which is very probable—be united to the Rio Colorado by a canal.[3]

Rio Buenaventura.] In 41° 30′ N. lat. lat., and 113° 30′ W. long., rises the Rio Buenaventura, from the western range which bounds the valley of the Rio del Norte. This stream runs to the S.W. till it enters a large salt lake of unknown dimensions: and from thence it is supposed again to issue, and to hold a western course till it enters the head of the gulf of St Francis, on the Pacific, in 38° 30′ N. lat. Its comparative course is 600 B. miles. From the Arkansaw to the head of the above gulf, is a distance of about 800 miles, crossing the Rio Del Norte, and going down the stream of the Buenaventura.

The Zaguananas or *Colorado.*] Immediately to the S.W. of the source of the above stream, is that of the *Zaguananas*, the most N.E. branch of the Colorado of California. Joined, soon after its issuing from the western side of the Sierra Madre, by the tributary streams of the *Rio de San Raphael, San Xavier*, and *Los Dolores*, it becomes a large and navigable stream. Nearly 300 miles of direct distance from its remotest source, it is joined by the combined streams of the *Rio de los Animas*, and *Rio de Nabajo*. Seventy miles farther S.W., the confluent stream—now denominated the *Colorado*—is joined by the *Jaguesila* or *Jaquesila*. In 32° 45′ N. lat., the *Rio Gila* joins the Colorado, after a western course of 380 B. miles from the Sierras de los Mimbros, or western side of the great chain of Topia. The Gila, though a large stream, is, however, fordable throughout its whole course, unless when swelled by the melted snows. The whole course of the Colorado, from its remotest source to its mouth in the head of the gulf of California, in 32° 30′ N. lat., is little above 600 B. miles, exclusive of its meanders.[1] It receives the appellation of *Colorado*, or 'Coloured river,' from its waters being coloured by the rains falling on a soil of red clay. It is a deep and copious stream, capable of being navigated for 300 miles and upwards by square-rigged vessels. Throughout the whole of its course, its banks are said to be entirely destitute of timber; and Pike was informed, that for 300 miles, there was not a tree 10 inches in diameter growing near it.

The Sonora.] Farther S. is the river *Hiaqui* or *Sonora*, a large and fertilizing stream, which, after a course of 350 miles S.W., from the western side of the Topian chain, falls into the gulf of California in 27° 30′ N. lat., and 111° 30′ W. long.

The Sabine, &c.] The coast between the Rio del Norte and the American frontier is well-watered. The Sabine river—which, according to the Mexicans, constitutes the boundary—including its windings, runs 300 miles. West of the Sabine are the *Toyac* and *Natches* rivers, two small streams which fall into the gulf of Mexico. Farther W. is *Trinity river*,

[3] In 1752, an extraordinary phenomenon occurred with this river. The whole bed of the river, for 90 miles above and 60 miles below the Passo, became wholly dry, and the river precipitated itself into a newly formed chasm, and only made its re-appearance near the Presidio de San Eleazario. This phenomenon continued for a considerable time; the fine plains surrounding the Passo, and which are intersected with small canals of irrigation, remained without water; and the inhabitants dug wells in the sand with which the bed of the river was filled. At length, after the lapse of a few weeks, the river resumed its ancient course.

[4] The Colorado is also denominated by the Jesuits, in their map of California, the *Rio de los Martyres*; while the Gila is called the *Rio Grande de los Apostollos*.

which rising in the belt of high land which bounds the valley of the Red river of Louisiana, in 33° 30′, falls into the gulf of Mexico, after an absolute course of 300 miles. Where Pike crossed it, it was 60 yards wide, with high steep banks and a rich luxuriant soil. To the S.W. of Trinity river, is the *Rio Brassos de Dios*, a very large stream, rising in 33° N. lat. in the province of Cohahuila. Running S.E. it enters the province of Texas, and falls into the gulf of Mexico, after a comparative course of 450 B. miles. Where Pike crossed it, the breadth of the stream was 300 yards, and it was navigable for large keels. The appearance of its banks indicates that it rises and falls 100 feet; its waters are red and turbid, with a rich prolific soil along its shores. To the S.W. of the Brassos is the *Rio Colorado de Texas*, a large stream, rising in the Sierra Obscura, or Namhi range, in 105° W. long. and 34° 30′ N. lat.; and which, after running a S.E. course of 700 B. miles, not including the windings, falls into the head of the bay of St Bernard, in 29° 40′ N. lat. and 96° 40′ W. long. Where it was crossed by Pike, the stream was 160 yards wide. It is navigable for a considerable distance by large boats.[5] To the S.W. is the combined stream of the *Guadaloupe* and *St Mark*, which falls into the bay of St Joseph, in N. lat. 29° and W. long. 97° 40′, after a course of 50 miles. Previous to their junction, both rivers hold separate courses of 150 miles each.—S.W. of the Guadaloupe and St Mark, is the river of *St Antonio*, which, at the capital of the province of Texas, is 20 yards wide and 12 feet deep, affording excellent fish, and supplying every part of the town with excellent water.—Farther to the S.W., and the last in the province of Texas, going from the American frontier, is the *Rio Nuecis*, which, after running a S.E. course of 250 B. miles, falls into the head of a large lagoon or haaf of the gulf of Mexico, 120 miles N. of the mouth of the Rio del Norte. All the rivers above enumerated belong to New Mexico.

The St Jago, &c.] In the viceroyalty of Mexico Proper, the chief river is the *St Jago*, which rises from a small lake 13 miles to the S.W. of the city of Mexico, on the W. side of the mountains which bound the valley of Tenochtitlan. It is first called the *Rio Lerma* or *Tololotlan*, but being soon after joined by the *Las Laxas*, the united stream is denominated the St Jago. Running to the N.W. it enters the lake of Chapala, and issuing from thence, it holds its course in a similar direction, and then turning to the S.W. falls into the bay of San Blas, on the Pacific ocean, in 21° 32′ 48″ N. lat., and 105° 12′ W. long. It is also sometimes called 'the Great river of Guadalajara,' and its absolute course is estimated at 600 B. miles.—The other rivers are the *Zacatula*, the *Motezuma*, the *Huasccualco*, the *Alvarado*, the *St Juan*, the river of *Tabasco*, and others which it would be tedious to describe. It may be observed, that as the isthmus decreases in breadth, the rivers become comparatively smaller, and of less importance, unless as far as some may eventually be of use in facilitating an intercourse between the Pacific and the gulf of Mexico.

Lakes.] The lakes of the valley of Mexico are the five following: namely, *Chalco*, *Xochimilco*, *Tezcuco*, *San Christobal*, and *Zumpango*, lying in a direction from S. to N. Of these, the lake of Tezcuco is the largest, and occupies the lowest level of the valley. The whole of these lakes contain nearly one-tenth of the valley, that is 22 square leagues, or 168¾ B. miles of water. The valley itself is of an oval figure, surrounded

[5] Its waters having a reddish tinge, it is sometimes denominated the *Red river*, and must be carefully distinguished therefore, from the Red river of Louisiana, and the Colorado of California.

on all sides by mountains, 55 miles long by $37\frac{1}{2}$ broad, and 67 leagues, or 201 B. miles in circumference, containing a space of $244\frac{1}{2}$ square leagues, or 1,876 B. square miles. All the humidity furnished by the lofty range which surrounds this valley is collected in the lakes; and not a single stream issues from the valley but the small brook of Tequisquiac, which, in a ravine of small breadth, traverses the northern chain of mountains, to throw itself into the Rio de Tula, or Motezuma. The central lake of Tezcuco is supplied by four rivers; and that of Zumpango, or the most northern, by two,—the latter of which streams, called Guautitlan, has a greater volume of water than all the other rivers put together. These lakes rise by successive degrees from the centre of the valley. The central lake of Tezcuco is consequently liable to great inundations from the swelling of the higher lakes, which pour their waters into it, and have laid Mexico repeatedly under water, the great square of that city being only $47\frac{1}{4}$ inches above the level of the lake. To remedy this inconvenience, a *desague*, or large canal, has been constructed, to carry off the waters of the northern lakes into the river Tula, and thus preserve the capital from inundation; but the design has comparatively proved abortive, and the city is still exposed to be inundated from the swelling of the lakes of Chalco and Xochimilco, which are 3 feet 9 inches higher than that of Tezcuco.[6] These five lakes are all more or less salt; but that of Tezcuco is most impregnated with that mineral, its water being heavier than those of the Baltic; the lake of Xochimilco is the most pure and limpid of all the lakes. The lake of Tezcuco is generally from 9 to 16 feet deep, but in some places it is even less than 3 feet. Hence its commerce suffers very much in the very dry months of January and February, for the want of water prevents them from going in canoes to the capital. The lake of Xochimilco is free from this inconvenience; for from Chalco, Mesque, and Tlahuac, the navigation is never once interrupted, and Mexico receives provisions in abundance daily by the canal of Iztacpalapan. The expense of the great canal for draining off the waters of the Mexican lakes into the river Tula, from 1607 to 1789, amounted to £1,291,770 sterling. It has been proposed to render this canal navigable to the sea; but the expense would more than overbalance the profit, as it would require more

[6] Two circumstances have also occurred since the conquest to increase this danger: namely, the destruction of the forests and the increased cultivation of the soil. The Spaniards, like the Anglo-Americans, hate trees, and would have the valley of Mexico to resemble the arid plains of Castile; they have not only cut down the trees in the plains, but even those on the slopes of the surrounding mountains. The cultivation of the land has, on the other hand, increased the depositions of soil in the lakes, and the rapidity of the inundations. Waters which glide over declivities covered with sward, carry off much less of the soil than those which run over loose soil. Now sward, whether formed from gramma, as in Europe, or small Alpine plants, as in Mexico, is only to be preserved in the shade of a forest. The shrubs and underwood also oppose powerful impediments to the melted snows descending from the declivities of the mountains; and when these declivities are thus stripped of their vegetation, the streams are less opposed, and more easily unite with the torrents which swell the lakes in the vicinity of the capital. The bed of the central or low lake of Tezcuco, is progressively rising, in consequence of the loose earth carried down by the torrents and deposited in it. If the report of a survey made in the 16th century (says Humboldt) be true, the great square of Mexico was elevated 43 feet above the level of the lake of Tezcuco, which latter is now only 47 inches lower than the former. On the other hand, the cutting down of the ancient forests, and thereby exposing the naked plain to the direct influence of a tropical sun, has diminished the humidity of the atmosphere, and has also increased the evaporation both in degree and rapidity. The lakes have therefore decreased both in extent and depth; and the city of Mexico, which in the days of Cortez stood environed by water, is now almost three miles from the lake of Tezcuco, which receives much less water by infiltration than in the 16th century.

than 300 locks to bring vessels from the sea to the level of the lake of Tezcuco, which is 7,467 feet higher than that of the sea.

Salt Lakes.] In addition to the large salt lake traversed by the Buenaventura, Humboldt has placed another very large lake, called *Timpanojos* or *Timpanogos*, in his map, extending from the 40th to the 43d parallel of latitude, to the N. of the Buenaventura, and to the W. of a chain of mountains called Sierras de Timpanojos. This large inland sea is pretended to have been discovered in 1777, by fathers Font and Escalante, in the course of a journey which they made from Taos, to the N.E. of Santa Fé, in New Mexico, across the country to Monterey in New California. If such a lake really does exist, it has never been since seen; Pike heard no word of it while he was in New Mexico, and considers its existence as totally fabulous; and the American hunters who since the expedition of Lewis and Clarke have traversed its supposed site, have not met with it. A small lake, 60 miles north and south, is placed on a southern branch of the Multnomah, by Mr Melish, in his large map of the United States, which may perhaps answer to that of Timpanojos, as it occupies part of the space allotted to it in Humboldt's map.

CHAP. III.—CLIMATE—SOIL AND PRODUCTIONS.

Climate.] If the extent of Central North America, combined with the extraordinary nature of its configuration, be considered, the variety of its climate must evidently be very great—embracing the extremes of equatorial heat and polar cold. The south-east portion, containing the republic of Guatimala, and part of the old viceroyalty, are far from being healthy, especially on the coasts. If climate were to be regulated by the mere circumstance of latitude, then the whole of Guatimala, and the greatest part of the former viceroyalty of Mexico, comprehending a space of 487,000 square miles, would feel the heat of the torrid zone; whilst the internal provinces,—the Californias,—the unoccupied tracts,—and the northern parts of the viceroyalty,—embracing a surface of nearly 1,012,000 square miles, would enjoy a moderate temperature. But this is not the case. Climate is affected by a variety of causes, and is regulated more by elevation than by latitude. Of this truth, Mexico affords a striking illustration. The whole of the coasts, along with the provinces of Guatimala, possess a warm climate, adapted for West Indian productions; the temperature of the plains, elevated not more than 984 feet above the sea, and within the tropics, is from eight to nine degrees of the centigrade thermometer greater than the mean heat of Naples, or 77° of Fahrenheit. These regions are denominated by the Spaniards, *tierras calientes*, and produce in abundance sugar, indigo, cotton, and bananas; when Europeans, unseasoned to the climate, remain in these low tracts for any time, especially in populous cities, they become the victims of the yellow fever, known under the name of *vomito prieto*, or the '*black vomit.*' The port of Acapulco, and the valleys of Peregrino and Papagallo, are among the hottest and unhealthiest places of the world. On the coast of the Mexican gulf, the great heats are tempered occasionally by streams of cold air brought by the winds from Hudson's Bay, towards the parallels of the Havannah and Vera Cruz, and blowing from October to March.

On the declivity of the table-land of Mexico, at an elevation of from 3,936 to 4,963 feet, there reigns a perpetually soft spring-temperature,

which never varies more than four or five degrees of Fahrenheit. The extremes of heat and cold are thus equally unknown. This region is denominated by the natives, the *tierras timpladas*, or 'the temperate regions,' where the mean heat of the whole year is from 68° to 70° of Fahrenheit,—the temperature of Xalappa, Tasco, and Chilpansingo, three cities celebrated for their salubrity, and the abundance of fruit-trees in their vicinity. Unfortunately this mean elevation of 4,264 feet is the height to which the clouds ascend from the sea; consequently these temperate regions are often involved in thick fogs.

The third temperature is that of the table-land of Anahuac, or elevated plains of Mexico, and denominated the *tierras frias*, or 'cold regions,' by the inhabitants. This elevated tract, comprehending a space of 23,000 square leagues, or upwards of 176,000 British square miles, within the tropic of Cancer, and embracing plains whose altitude is more than 7,217 feet above the sea, has a mean temperature of 62° of Fahrenheit. In the capital of Mexico, the centigrade thermometer has been known to fall several degrees below the freezing point; but this is a very rare occurrence, and the winters are usually as mild as at Naples. In the coldest season, the mean heat of the day is from 55° to 60° of Fahrenheit; in summer, the thermometer never rises above 75° in the shade. The mean temperature of the whole table-land is, therefore, equal to that of Rome. The plains, however, whose elevation is more than that of the capital, or exceed 8,201 feet, possess, within the tropics, a rude and disagreeable climate. Such are the plains of Toluca, and the heights of Guchilague, where, during a great part of the day, the air is never warmer than from 43° to 48° of Fahrenheit, and the olive-tree bears no fruit, though cultivated successfully in the valley of Mexico. All these upper regions enjoy a mean temperature of from 51° to 55° of Fahrenheit, and therefore equal to that of France and Lombardy; yet the vegetation is less vigorous, and European plants do not grow with the same rapidity as in their natal soil. The winters, at an elevation of 8,201 feet, are not very severe; but the solar rays are not sufficiently powerful, in the rarefied air of those plains, to accelerate the developement of flowers and the ripening of fruit. This constant equality,—this want of ephemeral heat,—imprints a peculiar character upon these equinoctial regions, in the higher climates. Thus, the cultivation of several vegetables on the ridge of the high table-land succeeds worse than in plains situated to the north of the tropics, though frequently the mean heat of these plains is less than that of the plains situated between the 19th and 22d parallels. Hence it appears, that the climate, productions, aspect, nay, the physiognomy of Mexico, are solely modified by the degree of elevation or depression of the soil. Under the latter parallel, sugar, cotton, cacao, and indigo, are only produced abundantly at an elevation of from 1,968 to 2,624 feet. European wheat occupies a zone on the declivity of the mountains, commencing at 4,592 feet, and ending at 9,842 feet of elevation. Bananas bear almost no fruit above 5,084 feet of elevation. Mexican oaks grow only between 2,624 and 9,842 feet of elevation; and the pines never descend towards the coast of Vera Cruz, lower than 6,068 feet, nor rise, near the region of lasting snow, to an elevation of more than 13,123 feet.

The climate of what are denominated the internal provinces, situated in the temperate zone, especially that of New Mexico, differs essentially from that of the viceroyalty, and from that of the same parallels in the old continent. Here, German winters succeed Italian summers. In the pro-

vince of New Mexico particularly, the air is much colder than in the same latitudes in the United States. The reason of this is plain: New Mexico is a long, and not very wide valley, bounded on all sides except the south by ranges of great and lofty mountains, covered with eternal snows, especially to the north of Santa Fé; and the air is pure, and not subject to damps and fogs. In the peninsula of California, the climate is mild, and the sky constantly serene and cloudless; and should any clouds appear for a moment at the setting of the sun, they display the most beautiful shades of violet, green, and purple. But unfortunately, the sky is more beautiful than the earth: the soil is sandy, and rains are very unfrequent. In New California, on the contrary, the air is obscured by frequent fogs, which however invigorate vegetation and fertilize the soil, which is covered with a black and spongy earth; and the climate is much more mild than in the same latitudes on the eastern coast of America. In the extensive province of New Biscay, or Durango, the air is dry and the heat intense, previous to the annual rains, which commence in June and continue till September. These rains, however, are but slight showers; and during the other nine months, there is neither rain nor snow to moisten the ground.[7] In the province of Texas, the temperature of the climate is the most delightful in the world; but as this province is level, and thickly covered with timber, the new settlers are generally unhealthy.

In the interior, but particularly in the greatest part of the table-land of Anahuac, the aridity of the soil bears a resemblance to that of Tibet and the saline steppes of Central Asia. The evaporation which takes place on great plains is sensibly increased by the great elevation of the Mexican Alps; on the other hand, the country is not sufficiently elevated for a great number of summits to pierce the region of perpetual snow. This region, which under the equator, is supposed (by Humboldt,) to commence at the elevation of 15,747 feet, and under the 45° of N. lat. at 8,365 feet, commences in Mexico between the parallels of 19° and 20° of latitude, at 15,091 feet of altitude. Hence, only four mountains, namely, Orizava, Popocatepetl, Iztaccihuatl, and the Nevado de Toluca, enter this region. To the north and south of this parallel, no mountains exhibit this phenomenon, till we arrive at New Mexico Proper. These snows, at their minimum in September, never descend below 14,763 feet in the parallel of Mexico. But in the month of January, they fall as low as 12,138 feet. While Humboldt was at Mexico, such immense falls of snow had taken place in January, that the mountains of Popocatepetl and Iztaccihuatl, were almost united by one band of snow. The difference between the *minimum* and *maximum*, or the oscillation of the limits of perpetual snow, is consequently, under the parallel of 19° N. lat., from one season to the other, 2,624 feet. If, however, Humboldt's statement of 15,091 feet, as the inferior limit or minimum of this region be true, he is inconsistent with himself, as the oscillation must be 2,858 feet, or 238 feet more. Nay, he affirms that in November the lowest limit of perpetual snow was 14,956 feet, or 193 feet higher than in September; whence we must infer, either that his hypothesis concerning the minimum

[7] The atmosphere is therefore so electric, that when Pike and his companions slept at Chihuahua, in taking off the blankets, they were almost completely covered with electric sparks. In a bottle prepared and covered with gold leaf, as a receiver, such a sufficiency of the electric fluid was obtained from a bear-skin, as gave a considerable shock to a number of persons!

of descent of these limits is erroneous, or that more snow falls in September than in November, which is contrary to universal experience and his own affirmation, which fixes it in November. These eternal snows, however, must not be confounded with the snows which in winter accidentally fall in much lower regions. This ephemeral snow is commonly seen at an elevation of 9,842 feet; it has been even seen in the streets of Mexiço, at an elevation of 7,470 feet, and at Valladolid, at an altitude of 6,156 feet, or 1,314 feet lower. If the cold of the high table-land be singularly great in winter, its heat is much greater in summer, than on the Andes of Quito. The great mass of the Mexican Alps, and the immense extent of the plains, produce a reverberation of the solar rays never observed in countries of greater inequality of surface. This intense heat contributes to the aridity of the soil. Rains are very unfrequent in the interior of the table-land; the great height of which, and the small barometrical pressure of the air, indicating its comparative want of condensation, accelerate the evaporation. The ascending columns of warm air from the low plains on the coasts, prevent the clouds from precipitating themselves in rain to water a land, dry, saline, and destitute of vegetation. This aridity of the central land, combined with a scarcity of rivers and a want of trees, greatly obstructs the working of the mines: however, it is happily confined to the most elevated districts. The declivity of the table-land is exposed to humid winds and aqueous vapours, and the vegetation nourished by these is uncommonly vigorous. The quantity of rain which annually falls at Vera Cruz is estimated at nearly 74 inches.

Diseases.] The diseases which make greatest ravages among the population, are: the small pox, the *matlazahuatl*, and the yellow fever, denominated, in New Spain, the *vomito prieto.* The first, introduced by the Europeans in 1520, appears to renew its ravages every seventeen or eighteen years. It committed terrible devastation in 1763, 1779, and 1797; and in 1779, in the capital alone, 9000 were swept off by this destructive disorder. Vaccine innoculation was introduced in January 1804, and has happily contributed here to extirpate a disorder which has swept off so many myriads of the native race, and almost depopulated the Californias. The *matlazahuatl* is peculiar to the Indians of New Spain, never attacking Europeans, or the mixed races. It has at different periods made great ravages among the natives, extending its baneful influence through the interior of the table-land, particularly in 1762, when the Indians of the valley of Mexico perished by thousands. Very little is known of the nature of this disease. The *vomito prieto* is chiefly confined to the maritime regions, where the climate is excessively warm and humid, as in the southern states of the American union. It is, however, unknown on the western coasts of Mexico. The greatest seat of its ravages is the city of Vera Cruz.

Soil and Vegetable Productions.] The variety of indigenous Mexican productions is immense; indeed there hardly exists a plant on the face of the globe which is not capable of being cultivated in this country.

Were the soil of New Spain watered by more frequent rains, no country cultivated by human industry in the two hemispheres would exceed it; but unfortunately, however fertile the soil, the want of water diminishes the abundance of the harvests. Only two seasons are known in the equinoctial regions of Mexico, even as far as 28° N. lat., namely, the rainy and the dry seasons; the former commencing in June or July, and continuing till the end of September or beginning of October; and the latter com-

mencing in October, and continuing till the end of May, or eight months. On the proportion between these two seasons greatly depends the prosperity of Mexico. The farmer has seldom reason to complain of too great humidity; and if sometimes his maize and European grains are exposed to partial inundations in the plains, several of which form circular basins inclosed by mountains, the grain sown on the slopes of the hills vegetates proportionally with greater vigour. From 24° to 28° the rains are still seldomer, and of short duration. Happily the melting of the snow, of which there is great abundance in these latitudes, supplies the want of rain. These droughts above mentioned compel the inhabitants in a great part of this vast country to have recourse to artificial irrigations.

The vegetable productions may be divided into two kinds: namely, those which serve for home-consumption, and those which furnish raw materials for manufactures and commerce. Amongst the former are the banana, the manioc, maize, European cerealia, potatoes, the oca, the igname, the batates, the cacomito, the tomatl, the chimalatl, rice, and finally, all the kitchen-herbs and fruit-trees of Europe. The latter comprehends the following plants: namely, the sugar-cane, cotton, flax, and hemp, coffee, cocoa, vanilla, sarsaparilla, jalap, tobacco, and indigo.

The Banana.] The banana is for all the inhabitants of the tropics, what the cereal gramina are for western Asia and Europe, and what the numerous varieties of rice are for the countries beyond the Indus, especially Bengal and China. Wherever the mean heat of the two continents, and the islands dispersed in the immense Pacific, exceed 75° of Fahrenheit, the fruit of the banana becomes one of the most important objects of cultivation for human subsistence. Under the name of *bananas*, a vast number of plants, essentially differing in the form of their fruits, are cultivated in the equinoctial regions, and even as far as 33° and 34° N. lat. In Mexico, three species of the banana are cultivated: namely, the true platano or *arton*, the *camburi*, and the *dominico*.[8] Notwithstanding the great height and extent of the Mexican table-land, the space favourable for the cultivation of the banana exceeds 384,000 B. square miles. In the warm and humid valleys of the intendancy of Vera Cruz, at the foot of the Alp of Orizaba, the fruit of the *platano arton* sometimes exceeds 11¾ inches, and is often from 7 to 8 inches long.

Maize.] Although a number of other grains are cultivated in Mexico, yet maize must be considered as the principal food of the people, and mo-

[8] Its cultivation requires but little attention: the suckers once plant d, nature does the rest. In ten or eleven months the fruit comes to maturity; the old stalks must then be cut away with the exception of the leading sprout, which bears fruit about three months after the mother-plant; and if the earth about the stems be loosened once or twice in the year, a platanar may be kept in full produce without any farther exertion. The fruit is used either fresh, or sliced and partially dried in the sun, when it is called *platano passado*. The difference between its produce and that of the cereal gramina of Europe is prodigious. Wheat, supposing it to be sown, and not planted in the Chinese manner, and calculating the produce at ten for one, does not produce on the same surface more than 33 lbs. of grain. The produce of potatoes, on an English acre containing 43,560 feet, will produce 60 bolls, or 40 320 lbs. of potatoes; so that the mean produce of the banana is to that of wheat as 133 to 1, and to that of the potato root as 44¾ to 1. But as the weights do not alone indicate the absolute quantities of nutritive matter, we must calculate according to the mass of vegetable substance necessary to support a full grown person. According to this principle, the same space of ground cultivated with the banana, will support 50 persons, which, if cultivated with wheat, would only support two persons, or 1 to 25. A Scotch acre of potatoes, according to Sir John Sinclair, will support nine persons; which is in the proportion of 9 to 2 of wheat, and of 9 to 50 of the banana. A European newly arrived in the tropical regions, is astonished at the extreme smallness of the spots under cultivation, round a cabin which contains a numerous family of Indians.

difies by its price that of all other kinds of grain. When the maize harvest is poor, either from want of rain, or premature frost, famine is general; but of all the gramina sown by man, none is so unequal in its produce as maize, which varies in the same field, according to the changes of humidity, and the mean temperature of the year, from 40 to 200, and 300 for 1. The price of maize varies from 2*s*. 2*d*. to 22*s*. the fanega of 100 lbs. The mean price in the interior of the country is 5 livres, or 4*s*. 4½*d*. the cwt.; but is so much increased by the carriage in a high mountainous region, that during Humboldt's stay at Guanaxuato, the fanega cost 9 livres, or 7*s*. 10½*d* at Salamanca; 10*s*. 6*d* at Quiretaro; and 19*s*. 3*d*. at San Louis Potosi. In a country where there are no magazines, and where the natives live merely from hand to mouth, the people suffer terribly whenever the maize remains for any space of time at 9*s* the fanega; the natives then feed on unripe fruits, berries, and roots. In warm and very humid regions, maize will yield from two to three harvests annually, but one only is generally taken. It is sown from the middle of June till near the end of August. Among the numerous varieties of this grain, there is one of which the ear ripens in two months after it has been sown; there is another kind, in the province of Nicaragua, which is reaped in 30 or 40 days after being planted; but these early varieties, whose vegetation is so rapid, have less farina, and are not so nutritious as the others. The ear is eaten boiled or roasted. When beat, maize yields a nutritive bread called *arepa*. The meal is employed like gruel in the soups which the Mexicans call *atolli*, in which they mix sugar, honey, and sometimes even ground potatoes. A great many fermented liquors are extracted from maize by the Mexicans, as the fistulous stalk of the maize is so sugary in these equinoctial regions, that Humboldt has seen the Indians sucking it as the negro does the sugar-cane. From the statistical table drawn up for the intendancy of Guadalajara, containing more than half a million of inhabitants, Humboldt thought it extremely probable, that the average actual and annual produce of maize in all New Spain exceeded 1,765,500,000 lbs. avoirdupois. Maize will keep three years in Mexico, in the temperate climates; and in the valley of Toluca, and all the high levels where the mean temperature is at 57° of Fahrenheit, for five or six years. In good years, New Spain produces much more maize than it can consume. As the West Indian Islands, especially the larger islands, consume an enormous quantity of grain, Mexico promises fair to be the maize granary of all the islands that are dispersed, whether in the gulf of the same name, or in the Carribean sea. One great cause of the enormous consumpt is, that the interest of the West India planters being almost wholly fixed on the cultivation of sugar, coffee, and cotton, no maize is cultivated in the islands.

Wheat.] Of European cerealia, wheat holds the first rank in Mexico, and was introduced by a negro-slave of Cortez, who found three or four grains of it among the rice that was served to maintain the Spanish army. These grains were sown before 1530. The temperate region, especially the climate where the mean temperature of the year does not exceed from 64° to 66° of Fahrenheit, seems most favourable to the cultivation of wheat, spelt, barley, oats, and rye. In the equinocial part of Mexico, European grains are no where cultivated in plains whose elevation is lower than from 2,629 to 2,952 feet above the level of the sea. The wheat harvests are rich in proportion to the quantity of water procured from the rivers by means of irrigating canals. In lands thus artificially cultivated, the produce of wheat is astonishing. Humboldt gives 25 bushels for one as the annual

produce of the whole average of the corn lands of Mexico. In France, the maximum of the ratio of the increase would be as ten to one; in England perhaps twelve. In the poorer parts of Germany, from five to six bushels for one is reckoned a very good crop. In Kentucky, 22 is the maximum; but in Mexico, when irrigation is properly conducted, and the year is good, from 60 to 80 bushels for one have frequently been produced. At Chotula, the ratio of increase is from 30 to 40 for one. At Zalaya, Salamanca, Leon, and Santiago, from 35 to 40 *communibus annis*. In the valley of Mexico it varies from 18 to 20, and even as far N. as new California, from 15 to 17 is not at all uncommon. Humboldt affirms, too, that the proportion between the seed and the produce would appear still greater, were it not for the great quantity of grain unnecessarily employed as seed, a great part of which is choked and lost; yet, notwithstanding this prodigious productiveness, wheat in Mexico is half as dear again as at Paris, and considerably exceeds the price which it bears in the English market.

Potato, Agave, &c.] The potato, though a native of America, was not known in Mexico in the days of Montezuma. It has been lately discovered growing in a wild state in the vicinity of the mountain Orizova, at an altitude of 10,000 feet. This vegetable is much cultivated in the highest part of the central land, and is admirably adapted for these elevated and dry regions, as its cultivation requires little humidity of soil. The Mexicans, like the Peruvians, preserve their potatoes for whole years by drying them in the sun; when hardened and deprived of their water, they are called *chunus*. Humboldt has seen them of a spherical form, and more than an English foot in diameter. The other vegetable roots which form the bases of Mexican subsistence are the *oca*, the *igname*, and the *batatis*; the first growing on the summit and declivity of the table-land,—the two latter, in the warm region of Mexico. On account of the enormous mass of nutritive matter at the roots of the igname, it is esteemed much preferable to the potato, but cannot be successfully cultivated, except in regions where the mean annual heat exceeds 64° of Fahrenheit. The *cacomite*, the *tomatl*, the *mani*, or ground pistacio, and different species of pimento, the fruit of which is as indispensable to the natives as salt to the whites, are all peculiar to Mexico. All the garden stuffs and fruit-trees of Europe are now cultivated in Mexico, in addition to those peculiar to the climate. In the market of Mexico there are daily sold more than 60 kinds of native fruits; and this variety of fruits is to be found all the way from Guatimala to the Californias. But the bread-fruit of the South Sea Islands, the flax of New Zealand, and the sugar-cane of Otaheite, are still unknown in Mexico, though they are now cultivated in the British and Spanish West India islands. Orange and citron trees flourish vigorously in the central regions; there is only one olive plantation in all Mexico, namely, that of the archbishop of Mexico, 2 leagues S.E. of the capital. The cultivation of the vine was always discouraged in New Spain by the court of Madrid. During Humboldt's stay in Mexico, the viceroy received orders to pull up all the vines in the N. of Mexico, to satisfy the clamours of the merchants of Cadiz, who complained of a diminution in the consumption of Spanish wines; the order, however, was happily not executed, from dread of exciting a rebellion. The vine is most successfully cultivated in some districts of New Mexico, where no wine is used but what is produced in the country. At Parras, in Cohahuila, containing 7000 souls, the whole population is employed in this species of cultivation. But that which constitutes the favourite

beverage of the Mexican Indians, properly so called,—for the Otomite, Totonac, and Mistic Indians, are not addicted to liquors—is the juice of the *agave*, a shrub which is cultivated throughout the whole space where the Aztic language is spoken. This plant, which is scarcely five feet in height, yields a honey-like juice at the time of the efflorescence of the plant, which in a good soil takes place in five years, but eighteen years in a poor soil. At this period, an incision is made in the bundle of central leaves, which is insensibly enlarged and covered with lateral leaves. In this incision is deposited all the juice, which continues running for three months, and is tapped by the Indians three or four times a-day. 'A foot of the plant often yields, in 24 hours, 8 quartillos, or 242 English cubical inches of juice; and a very vigorous plant sometimes yields 15 quartillos, or 454 cubic inches, in the same space of time, for four or five months. This is so much the more surprising, as this plant thrives in the most arid soil; is neither affected with cold, nor drought, nor hail.—Its juice is fermented in three or four days, and is then called *pulque;* this liquor resembles cyder in taste, and is esteemed an excellent and nutritive drink. The consumption of this fermented juice of the agave is immense; the annual quantity used in the capital alone, amounting to 294,790 cargas, each carga containing 331 lbs. A very intoxicating brandy, called *mexical*, is formed from the pulque. This brandy was strictly prohibited by the Spanish government, as being prejudicial to the use of Spanish brandy, but the illicit distillation was always enormous. The agave shrub also supplies the place of the hemp of Asia, and the papyrus of Egypt. All the Mexican manuscripts brought to Europe, are written on paper made of the fibres of agave leaves, macerated in water, and disposed in layers like the Egyptian papyrus.

Sugar.] The cultivation of the sugar-cane has made such rapid progress of late years in Mexico, that the exportation of sugar at Vera Cruz, when Humboldt wrote, amounted to 13,793,750 lbs. annually, and produced a revenue of £312,525 sterling. The sugar-cane is cultivated in the intendancies of Vera Cruz, Guanaxuato, La Puebla, Mexico, Valladolid, and Guadalajara. The mean temperature most suitable to the cultivation of this plant, is from 75° to 77° of Fahrenheit. It is, however, cultivated on the declivity of the table-land, at an elevation of 3,280 feet, and at a temperature of from 66° to 68° of Fahrenheit. Even on the central table-land, sugar vegetates vigorously, without suffering from frost in winter, at an elevation of from 4,592 to 4,920 feet. In favourable exposures, especially in valleys screened from the north wind by mountains, the highest limit of sugar-cultivation reaches 5,561 feet; even as high as 6,211 feet above sea-level, sugar plantations exist, to the north of Guanaxuato, in N. lat. 22° 30′. Although there are sugar-plantations in the intendancy of La Puebla, which yield annually more than from 1,103,500 to 1,655,200 lbs., almost all the Mexican sugar is manufactured by Indians, and consequently by free hands. "The possibility," says Ward, "of cultivating the sugar-cane beneath the tropics, by a system of free labour, has often been canvassed; but I know no country except Mexico where the experiment has been fairly tried upon a large scale. The plantations of Cuernavaca were all worked in the first instance by slaves, who were purchased at Vera Cruz at from three to four hundred dollars each. The difficulty of insuring a sufficient supply during a war with a maritime nation, and the number of slaves who perished from the sudden change of climate on the road from the coast, induced several of the great proprietors to endeavour to propagate a race of free labourers by giving liberty to a certain

number of slaves annually, and encouraging them to intermarry with the native Indians, which they soon did to a very great extent. The plan was found to be so economical, that on many of the large estates there was not a single slave in 1808; but the policy of the measure became still more apparent in 1810, for as soon as the revolution broke out, those planters who had not adopted the system of gradual emancipation were abandoned at once by their slaves, and forced in some instances to give up working their estates; while those who had provided themselves in time with a mixed caste of free labourers, retained, even during the worst of times, a sufficient number of hands to enable them to cultivate their lands, although upon a reduced scale." In the warm and fertile parts of New Spain, and in plains capable of irrigation, where plants with tuberous roots, such as the igname and batatis, have preceded the cultivation of the sugar-cane, the annual produce amounts to from 4,633 to 6,178 lbs. per hectare of 107,639 feet, but the mean produce is 3,089 lbs. on the same space of ground. " Such, in general, is the fertility of equinoctial Mexico, (says Humboldt,) that I am persuaded that all the sugar consumed in France, which I estimate at 44,140,000 lbs., might be produced on a surface of 55 British square miles." The greatest part of the sugar produced in New Spain is consumed in the country, which is estimated by Humboldt to be 35,000,000 lbs. and which, added to the exportation at Vera Cruz, makes the total produce amount to 48,793,750 lbs.

Cotton.] Although the soil is equally favourable for the cultivation of cotton, yet the quantity cultivated is comparatively inconsiderable. Cotton of the finest quality is cultivated on the South Sea coast, from Acapulco to Colima, and at the port of Guautlan, and to the south of the Volcan de Jorullo; but two circumstances operate as obstacles to its cultivation, namely, the want of machines for separating the cotton from the seed, and the high price of carriage. Cotton-gins, however, have been lately introduced by a fugitive American. The eastern coast, between the rivers Huasecualco and Alvarado, might supply the commerce of Vera Cruz with an enormous quantity of cotton, but this space is almost uninhabited, and the want of hands occasions a scarcity of provisions unfavourable to every agricultural establishment. The quantity of cotton exported from Mexico to Europe, amounted, in 1810, to 688,584 lbs.—an inconsiderable quantity indeed, but six times more than that exported by the United States in 1791.

Coffee, Chocolate, &c.] The cultivation of coffee is almost unknown in New Spain, the whole quantity consumed not exceeding 400 or 500 quintals annually. The cultivation of the cocoa-tree is now much more neglected in Mexico than at the time of its conquest, when the Spaniards became acquainted with that precious plant, and afterwards transplanted it into the Canary islands, and the Philippines. At that time the Mexicans prepared a beverage called by them *chocolatl,* whence the modern term chocolate is derived. The fruit of the cocoa-tree was formerly used as currency, 6 nuts being equivalent to 1*d.* English. The number of cocoa-trees is now very inconsiderable, the cultivation being chiefly confined to Guatimala, which, in conjunction with Maracaybo, the Caraccas, and Guayaquil, supply the consumption of Mexico itself, which is annually 3,300,000 lbs. All the vanilla used in Europe comes from Mexico, by way of Vera Cruz, and is produced on a surface of a few square leagues of ground, in the intendancies of Vera Cruz and Oaxaca. The quantity

annually exported is 910 millaries, and 40,000 dollars in value. Sarsaparilla is also produced on the same eastern slope of the Mexican Alps where the vanilla is produced. The quantity exported from Vera Cruz, in 1803, amounted to 51,750 lbs. The quantities of red pepper raised in all parts of the country is almost incredible. "The Mexican," says Mr Robinson, "would rather go without bread, than lack *chile* with his meat. Both in its green and dried state, the quantity consumed is incredible. When mashed, and mixed with a little water, it is the universal sauce on the tables of the great; while with the poor, it forms a component part of their diet. More than one-third of the Mexican population live, throughout the year, chiefly on tortillas with chile spread on them, as butter is with us. On days of festivity, they have occasionally a change of diet, by the addition of a few eggs or a little broth; but they never relinquish their favourite chile. A stranger has great difficulty at first to bear with the food prepared with chile; but after his palate has become accustomed to its stimulus, it ceases to excoriate, and he grows as fond of it as the Indians and Creoles." The famous medicinal purgative called *Jalap*, from Xalappa, in the vicinity of which it is cultivated, vegetates at an absolute height of from 4,261 to 4,592 feet, on the whole mountainous slope from the Volcan de Orezava to the Coffre de Perote. This root is a species of convolvulus, the same with that discovered in Florida by Michaux. It delights in a temperate clime, in shaded valleys, and mountain slopes. The whole quantity exported from Vera Cruz, in 1802, was 2,921 cwt., and in 1803, 2,281 cwt.—more than one-half below Raynal's estimate, which makes Europe to consume 7,500 cwt. of this article annually.

Tobacco, &c.] The cultivation of Mexican tobacco might have become an object of the greatest importance, had the trade been free. But after the introduction of the crown monopoly, in 1764, permission was not only requisite to plant tobacco, but even the cultivator was compelled to sell it to the royal farm at an arbitrarily fixed price, and the cultivation was restricted solely to the environs of the towns of Orizava and Cordova, and the districts of Huatusco and Songolica, in the intendancy of Vera Cruz. This monopoly was very injurious to the interests of the country, as many districts decreased in population, after the cultivation of this plant was restricted to the eastern slope of the table-land. The quantity produced in the assigned districts, was estimated at 2,000,000 lbs.; but this estimate is far too low, as appears from the data of official papers, wherein it is stated that the farm of tobacco and snuff in Mexico was annually sold in the country itself for more than £1,588,460 sterling, and yielded to the king a nett revenue of £833,400 sterling. The quantity of tobacco and snuff consumed in New Spain must have therefore been enormous, as the Indians themselves make no use of this noxious weed whatever. The cultivation of indigo is much neglected in Mexico; a few plantations along the western coast are sufficient for the few manufactures of home-made cloth. The indigo is annually imported from Guatimala, where the total annual produce of the plantations amounts to £600,000 sterling.

Animal Kingdom.] With the exception of the cochineal insect, the most valuable animals known in Mexico have been introduced by Europeans. The Mexicans themselves had not even reduced to a domestic state the two species of wild oxen, which wander in immense herds near the plains of the Rio del Norte; they were unacquainted with the lama of the Cordilleras of the Andes; and made no use of the wild sheep of

California, or of the wild goats of New California. Among the numerous species of dogs peculiar to Mexico, one species, the *techichi*, served for food to the inhabitants. This species being perfectly dumb, gave rise to a report that the Mexican dogs could not bark. The want of domestic animals was severely felt before the conquest, and forced a large portion of the people to labour as beasts of burden, and to do that service which is now performed by mules. Since the conquest, the domestic animals imported from Europe, as oxen, sheep, horses, and hogs, have multiplied amazingly, especially in the vast plains of the internal provinces. Immense numbers of horned cattle feed on the ever-verdant pastures, lying between the Huasecualco and the Alvarado. The capital, however, and the great towns in its vicinity, draw their chief supplies of animal-food from the intendancy of Durango. The natives, like the Chinese and Cochin-Chinese, care very little for milk, butter, and cheese; but the two latter are in great request among the castes of mixed extraction, and form a very considerable branch of foreign commerce. In the intendancy of Guadalajara, the annual value of dressed hides manufactured, amounted to 419,080 dollars.

The horses of the northern provinces, and particularly of New Mexico and the province of Texas, are as celebrated for their excellent qualities as those of Chili; both are said to be of Arabian extraction. Vast herds of wild horses wander in the savannahs of Texas, and their exportation to New Orleans, and the western states of the American Union, becomes every year of greater importance. Many Mexican families possess in their *hatos de ganado* from 30,000 to 40,000 head of oxen and horses. The mules would be still more numerous, if so many of them did not perish on the highway, from the excessive fatigue of journeys of several months' continuance. The commerce of Vera Cruz alone employs 70,000 mules; and 5000 are employed in the carriages of the city of Mexico.

The rearing of sheep has been wonderfully neglected in New Spain, as well as in all the other Spanish colonies. None of the travelling Merino sheep seem to have been introduced, and no care has been taken to ameliorate the breed. The best wool is produced in the intendancy of Valladolid. In New Mexico, the colonists, though they scarcely take half from the fleece of the sheep, for the coarse manufactures of the country, and for making beds, have always immense quantities of raw wool lying on their hands, so that it is sold for a mere trifle.

Of wild animals peculiar to Mexico, the gigantic stags of New California, called *venados* by the Spaniards, are the chief. All the forests and plains are filled with droves of this animal, which is justly affirmed by every traveller, to be the most beautiful quadruped of America, and is quite different from the elk of the United States. They are of a brown colour, smooth, and without spot. Their branches, of which the antlers are not flat, are 4½ feet long; nay, some have been seen whose branches were near nine feet long. They run with great rapidity, throwing their heads back, and supporting their branches on their backs. No horses are capable of outrunning them; but they are caught by nooses in the same manner as the wild horses are caught in the province of Texas. The other wild animals are, the tapir, which is extremely fierce and voracious, and whose skin will resist a musket-ball, great numbers of monkeys of various species, bears, wolves, foxes, and wild cats; all these, except the tapir, are common to both continents. The jaguar is met with in the lower part of Mexico. Of the hog there are only two varieties in

Mexico, the one introduced from Europe, and the other from the Philippine islands. They have multiplied amazingly on the central table-land; and in the valley of Toluca a very extensive and lucrative commerce in bacon is carried on.

Birds.] The feathered tribes are so numerous, and of such various appearances and qualities, that Mexico has been called the country of birds, as Africa is of quadrupeds. The botanist and natural histórian Hernandez describes above 200 species of birds peculiar to Mexico. The eagles and hawks of Mexico are allowed to be superior to those of Europe; one hundred falcons were sent annually into Spain at the desire of Philip II. The species of Mexican eagle called *isquaulitli*, which is the largest and most beautiful, will attack not merely the larger birds and quadrupeds, but even man himself. The Mexican ravens do not, like those of other countries, feed on carrion, but upon grain. Aquatic birds are very numerous, and of great variety. There are at least 20 species of ducks, which sometimes cover the fields in vast quantities. There are also vast numbers of geese, with several species of herons, swans, quails, pelicans, &c. New Spain has furnished Europe with the largest of domestic birds, the turkey, formerly found wild on the back of the Cordillera, from the isthmus of Panama to New England. Several thousand of these were in the poultry yards of Montezuma. The wild turkeys are now to be found in the northern provinces only, having withdrawn as the population increased, and the forests became thinned. Guinea-hens are very rare in Mexico; but the goose is the only one of the herds of our poultry yards which is no where to be found in all the Spanish American dominions.

The Humming-Bird.] Mr Bullock has devoted a chapter to the description of the humming-bird, of which there have already been collected above a hundred varieties. The various species of this charming little race are scattered over the whole American continent and its islands, in almost every climate; being found, during the summer months, in Canada and Hudson's Bay. In Jamaica, Mr Bullock procured the most diminutive species known, which is considerably smaller than some kinds of bee. In Mexico, the species are numerous, and mostly undescribed. This gentleman, during his residence in the capital, had at one time in his possession nearly seventy in cages, which, by means of great care, he kept alive for several weeks. "The accounts," he says, "of their being so fierce and untameable as to beat themselves to death when confined, are not true; no bird is more easily reconciled to its new situation. It is true, they are seldom off the wing, but they never beat themselves against the cage, or the glass of a window. They remain, as it were, suspended in the air, in a space barely sufficient for them to move their wings; and the humming noise proceeds entirely from the surprising velocity with which they perform that motion, by which they will keep their bodies in the air, apparently motionless, for hours together. In each cage was placed a small earthen cup, about half filled with sugar and water of the consistence of a thin syrup: in this, various flowers had been inserted, principally the yellow bell-shaped corolla of the great aloe (*agave Americana*); the end of which next the stem being cut off, permitted the liquid to flow into the flower, into which the little prisoners were constantly inserting their long bifid tongues, and drawing up its luscious contents. This operation was generally, like most of the actions of the bird, performed on the wing; but they sometimes alighted on the flower, perching

against its sides in an upright position, and pumping up the mucilaginous liquid. It is probable, the whole of them feed on insects; numbers, I am certain, do so, having watched them attentively in the botanic garden at Mexico, in pursuit of their minute prey; and in the yard of the house in which I resided at Themascaltepec, one of them took entire possession of a pomegranate-tree in blossom, on which he sat the whole day, catching the small flies that came to the flowers. Naturalists have therefore fallen into error in asserting that these birds live entirely on the saccharine substance contained in flowers, as I have very frequently seen them take flies and other insects on the wing, and have on dissection found them in their stomachs. I have frequently watched with much amusement the cautious peregrination of the humming-bird, who, advancing beneath a spider's web, entered the various labyrinths and cells in search of entangled flies; but, as the larger spiders did not tamely surrender their booty, the invader was often compelled to retreat: being within a few feet, I could observe all their evolutions with great precision. The active little bird generally passed once or twice round the court, as if to reconnoitre his ground, and commenced his attack by going carefully under the nets of the wily insect, and seizing by surprise the smallest entangled flies, or those that were most feeble. In ascending the angular traps of the spider, great care and skill were required; sometimes he had scarcely room for his little wings to perform their office, and the least deviation would have entangled him in the complex machinery of the web, and involved him in ruin. It was only the works of the smaller spider that he durst attack, as the largest rose to the defence of their citadels, when the besieger would shoot off like a sunbeam, and could be traced only by the luminous glow of his refulgent colours. The bird generally spent about ten minutes in this predatory excursion, and then alighted on a branch of an Avocata to rest and refresh himself, placing his crimson star-like breast to the sun, which then presented all the glowing fire of the ruby, and surpassed in lustre the diadem of monarchs. Europeans who have seen only the stuffed remains of these little feathered gems in museums, have been charmed with their beautiful appearance; but those who have examined them whilst living, displaying their moving crests, throats, and tails, like the peacock in the sun, can never look with pleasure on their mutilated forms. I have carefully preserved about two hundred specimens, in the best possible manner, yet they are still but the shadow of what they were in life. The reason is obvious; for the sides of the laminæ, or fibres of each feather, being of a different colour from the surface, will change when seen in a front or oblique direction; and as each lamina or fibre turns upon the axis of the quill, the least motion, when living, causes the feathers to change suddenly to the most opposite hues. Thus the one from Nootka Sound changes its expanded throat from the most vivid fire-colour to light green; the Topaz-throated does the same; and the Mexican Star changes from bright crimson to blue. The sexes vary greatly in the plumage in many of the species; so much so, that it is with difficulty we recognise them. The male and female of the Mexican Star could not have been known had they not been seen constantly together, and proved to be so by dissection. They breed in Mexico in June and July; and the nest is a beautiful specimen of the architectural talent of these birds: it is neatly constructed with cotton, or the down of thistles, to which is fastened on the outside, by some glutinous substance, a white flat lichen resembling ours. The female lays two eggs, perfectly white, and large

for the size of the bird; and the Indians informed me, they were hatched in three weeks by the male and female sitting alternately. When attending their young, they attack any bird indiscriminately that approaches the nest. Their motions, when under the influence of anger or fear, are very violent, and their flight rapid as an arrow; the eye cannot follow them, but the shrill piercing shriek which they utter on the wing may be heard when the bird is invisible, and often led to their destruction by preparing me for their approach. They attack the eyes of the larger birds, and their sharp needle-like bill is a truly formidable weapon in this kind of warfare. Nothing can exceed their fierceness when one of their own species invades their territory during the breeding season. Under the influence of jealousy they become perfect furies; their throats swell, their crests, tails, and wings expand; they fight in the air, (uttering a shrill noise,) till one falls exhausted to the ground. I witnessed a combat of this kind near Otumba, during a heavy fall of rain, every separate drop of which I supposed sufficient to have beaten the puny warriors to the earth. In sleeping, they frequently suspend themselves by the feet, with their heads downwards, in the manner of some parrots. These birds were great favourites of the ancient Mexicans. They used the feathers as ornaments for their superb mantles in the time of Montezuma, and in embroidering the pictures so much extolled by Cortez. Their name signifies in the Indian language, beams or locks of the sun. They are still worn by the Indian ladies as ornaments for the ears."

Insects.] As wax is an object of great importance in a Catholic country, the rearing of bees has been always a principal concern. Bee hives are extremely productive in the province of Yucatan, which, in 1803, exported above 16,000 lbs. of bees' wax to Mexico. The bees of Yucatan are said to be destitute of stings, and have thence obtained the appellation of 'little angels,' from the Spaniards. The vicinity of sugar-plantations is unfavourable to bees, who are so greedy of sugar, that they drown themselves in the juice of the cane; which intoxicates them, and renders them inactive when they drink it to excess. The rearing of the cochineal insect is of great antiquity in Mexico, but was formerly more general than now. These insects feed upon a shrub called the nopal; but Spanish avarice and oppression ruined this branch of Indian industry, everywhere except in the intendancy of Oaxaca. In Yucatan, 50 years since, the Indians cut down in one night all the nopaleries, where the cochineals were reared. There are two species of the insect, namely, the fine, and the wild cochineal; it is the former which is reared, and produces three kinds of cochineal, denominated *grana*, *granos*, and *palvos de grana*. The quantity of cochineal furnished to Europe by the intendancy of Oaxaca is 880,000 lbs. annually, or upwards of £500,000 sterling in value.

As to the Mexican fisheries, they are at present of no importance. The pearl-fisheries of California were much more productive anciently than now; but have been long since abandoned, though several successive efforts have been made to re-establish them. The western coasts of New Spain abound in spermaceti-whales, but this fishery has been wholly engrossed by the British and Americans.

CHAP. IV.—MINES AND MINERALS.

THE Mexican mountains, like those of the old continent, contain almost every mineral indispensable to agriculture, manufactures, and the fine arts.

Unfortunately, however, the labour of man has, in Spanish America, been almost exclusively devoted to the extraction of gold and silver from the bowels of the earth. The mines of iron and lead on the ridge of the Mexican Cordilleras, which only require to be opened to disclose their superabundance, have been wholly neglected; while those of gold and silver have been sedulously wrought, even while they exhibited but small indications of wealth. Hence it happened, that in the superabundance of the precious metals, the want of the others was severely felt in this country, whenever foreign commerce had been suspended by those wars in which Spain successively engaged. Thirty millions of dollars have been accumulated in Mexico, while the manufacturers and miners were suffering from the want of steel, iron, and mercury. Before the piece of Amiens, iron had risen in Mexico from 18*s*. 9*d*. to £11 5*s*. per cwt.; and steel from £3 10*s*. to £56 17*s*. 6*d*. per cwt. The Mexican colonists were in the issue obliged to have recourse to the iron and mercury of their own mountains, and began to manufacture their own steel; but no sooner was peace restored, than these undertakings were abandoned, and the iron, steel, and mercury of Europe, began to be exclusively employed as formerly. To the superabundance of the precious metals, has been likewise attributed the backwardness of agriculture in the Spanish colonies; but Humboldt is of a different opinion. So far is mining (says he) from being prejudicial to agriculture, that no sooner is a mine discovered and wrought, than cultivation immediately commences in its vicinity; towns and villages are built; provisions are wanted for the workmen, and subsistence for the cattle employed in the mines; whatever the vicinity can produce is raised in abundance. A flourishing agriculture is thus established, which very frequently survives the prosperity of the mine to which it was indebted for its origin. The husbandman remains and cultivates his field, after the miner, who had first set him on work, is gone to another district in quest of a more abundant or less exhausted mine. The Indians, in particular, who prefer mountains to plains, seldom quit the farms which they have established, though the mines have been relinquished, to which they owed their original inducement to settle there. Indian villages and farms are continually found in the valleys and amidst the precipices of the highest mountains. In a similar manner, the agriculture of Lombardy and Flanders continues still to flourish, though the manufacturing industry of these countries has greatly declined.

All the Mexican mines are situated between the extreme points of 16^0 and 31^0 N. lat. none having as yet been discovered to the south or north of these latitudes. Within this space are contained about 350 *reals*, or places celebrated for mines in their vicinity; and the number of mines comprehended in these reals is nearly 3000. More than 200 of these reals are marked in Humboldt's map of New Spain. These mines were again divided, under the old regime, into 37 districts, over which were placed the same number of councils, called *Diputaciones de Mineria*. The following table exhibits a view of the mining districts and reals in Mexico, according to Humboldt:

Intendancies.	*Districts.*	*Real*
1. Guanaxuato, . . .	1	19
2. Zacateras, ...	4	14
3. San Louis Potosi, . .	5	28
4. Mexico, . .	7	60
5. Guadalajara, . . .	3	44
6. Durango, ...	5	61

7. Sonora,	7	68
8. Valladolid,	4	27
9. Oaxaca,	1	17
9	37	337

In the intendancies of Puebla, Vera Cruz, and Old California, there were no Diputaciones, as in the other intendancies; but the number of reals amounted to 12. Total, 349.

The Mexican mines are geologically divided by Humboldt into 8 groups, almost all placed either on the ridge, or on the western side of the Cordillera of Anahuac; the whole forming a surface of 12,000 square leagues, or 100,000 British square miles. These groups are not to be considered as forming one connected and continuous surface, but as so many distinct localities, with vast tracts of intervening spaces, almost totally destitute of metalliferous veins. Of these 8 groups, that which contains, within a surface of 16,000 square miles, the mines of Guanaxuato, Zacatecas, and Catorce, is by far the richest, supplying more than one-half the metallic produce of New Spain. The principal rocks which at present furnish almost all the silver of Mexico, are porphyritic, reposing on beds of primitive slate, grey-wacke, and alpine limestone. The most celebrated mines of Mexico are situated at absolute heights of from 5,904 to 9,842 feet; whilst those of Freyberg in Saxony, and Clausthal in the Harz, are only elevated from 1,188 to 1,869 feet above the sea. The temperate climate of the Mexican mining-towns is a perfect contrast to the cold, arid, and disagreeable climate of Micuipampa, Pasco, Huancavelica, and other mining-stations in Peru, where the absolute elevation is much greater.

History does not inform us at what period the mines of Mexico began to be wrought, or were first discovered. It is well-known, however, that the natives did not content themselves with those minerals which they found in their native state on the surface of the earth, and particularly in the beds of rivers and ravines formed by torrents,—but applied themselves to subterraneous operations in working veins, cutting galleries, and digging pits of communication and ventillation, and that they possessed instruments adapted for cutting rocks. Gold, silver, copper, lead, and tin, were publicly sold in the great market of Mexico. The tribute of the people of Tzapolica and Mixtecapan, was paid in two ways, either by collecting in small wicker baskets the grains of native gold, or by founding the metal into bars. These bars, like those now used in trade, are represented in the ancient Mexican paintings In the time of Montezuma, the silver mines of Tasco, and those which run across the mountains of Zumpango, were wrought by the natives. Lead and tin were extracted from the veins of Tasco; cinnabar, from those of Chilapan; and copper—which was commonly employed in all the mechanical arts, and supplied to a certain extent the use of iron and steel, and of which all their arms, axes, chissels, and tools were made—from the mines of Zacotollan and Cohuixo. The mines of Tasco, Zultepeque, Tlapujahua, and Pachuca, were the first wrought by the Spaniards. Those of Zacatecas followed very closely. The vein of San Barnabe was begun 28 years after the conquest. The principal vein of Guanaxuato was discovered somewhat later. The mines of Comanjas are still more ancient than those of Guanaxuato, but their date is unknown.

Mines of Guanaxuato.] Since their first discovery, in the middle of the 16th century, the veins of Guanaxuato have alone produced to the amount of £57,754,620 sterling; and from 1786 to 1803, a period of 18 years, the annual average was 556,661½ marks of silver, value 4,731,624

dollars, or £1,089,615 8s. sterling, or upwards of 365,000 lbs. troy of 12 ounces per lb. All the veins of Hungary and Transylvania put together, only yield 85,000 marks of silver, or 55,686 lbs. troy; so that the annual produce of the mines of Guanaxuato, is to all these latter combined, as 6½ to 1. The mine of *Valenciana* in Guanaxuato, originally belonged to two single individuals, namely, the count de Valenciana, and M. Otero. It was not begun to be worked till 1760; and then by a solitary adventurer. In 1766, the works were already 262 feet in depth; and the expenses greatly exceeded the metallic value of its produce. In 1768 it began to pay, in proportion as the pit grew deeper. From 1771 to 1804, this mine never yielded less than £583,380 sterling annually to the two proprietors; and in some years, the nett profits clear of all expenses amounted to £250,000 sterling. The mine is now wrought to the depth of 1,685 feet. The present expenses of working the mine have been prodigiously augmented by the depth of the shafts and the prolongation of the galleries; and it will require a large capital to establish forcing pumps to extract the water. "In many instances," says a late writer, "it will be impossible to employ steam as the moving power, from the great scarcity of fuel."

An American traveller gives the following account of the mines of Guanaxuato: "The excavations extend from S.E. to N.W. 1,600 yards, and 800 yards in a S.W. direction. There are three parallels, or plains, worked on ramifications of the principal vein. The *veta madre*, or mother-vein, was here found not more than 22 feet wide, and without any ramification, from the surface of the soil to the depth of 557 feet: at this depth, it divides into three branches, the entire mass being from 165 to 195 feet thick. Of these three branches, not more than one is in general very productive. They have all the same angle (45°), but vary in thickness from 9 to 40 yards. Four shafts descend to these parallels. The first, called San Antonio, is of 741 feet perpendicular depth: the cost of this shaft was 396,000 dollars. The square shaft of Santo Christo, 492 feet deep, cost 95,000 dollars. The hexagon shaft of our Lady of Guadeloupe, 1,131 feet perpendicular depth, cost 700,000 dollars. San Josè, an octagon shaft of more than 1,800 feet perpendicular depth, and 300 feet in the direction of the *veta madre*, which is an angle of 45°, cost 1,200,000 dollars. To understand the necessity of sinking so many shafts of different depths, it may be necessary to explain, that in following the dip of the vein, which is first discovered on the surface, and is almost invariably an angle of 45°, the work is impeded after a certain depth by water. A shaft is then sunk, so as to intercept the vein at the termination of a gallery, in order to free the mine from water. The work is then continued until it becomes necessary to sink another shaft still deeper, to clear the lower galleries. At the termination of each shaft a great many parallel galleries branch out on ramifications of the mother-vein.

"From these parallels a vast number of smaller galleries branch out, worked to a greater or less distance as the ore proved to be of good or bad quality; and many of them were pierced with a view of discovering other veins. Besides the shafts, there are two descents by steps, winding down to the last parallel. On leaving the house of the administrator, we were conducted to the first flight of steps: preceded by four men carrying torches, we descended to the first parallel, and stopped where four galleries branch off. Our torch-bearers were sent off to the extremity of these galleries, that we might form some idea of their extent in a straight

line. They are both extensive and solid; the vaults are of porphyry, and the bottom of gray slate. In some places where the ore proved very rich, it has been taken from the sides and vaults, and the voids filled up with masonry and beams, worked in so as to form a firm support to the sides and roof. These galleries have been blasted out, and must have cost great labour, for the whole mountain is of porphyry to a great depth.

"The exterior is covered with a crust of breccia, which extends not more than four or five feet from the surface. The ore is for the most part extracted by drilling and blasting: sometimes, but very rarely, the wedge can be used. On our return, we plodded painfully up these stairs, which the *cargadores* (porters) ascend with ease, with a load of ten or fifteen arrobas on their shoulders. They are paid according to the quantity they bring up; and some of these men will ascend, as we are told, from the perpendicular depth of 500 yards, carrying the enormous weight of twenty-four arrobas (600 lbs.). In the court-yard into which we entered from the gallery, and where the workmen are searched, there was a large heap of ore, accumulated by each workman being obliged to bring a stone up in his hand every time he ascends, and throw it on this heap. There are about 1,000 workmen at present employed, and in the course of a week a large pile is formed. The product of this belongs to the mine, and forms a fund for contingent expenses. The matrices of these ores, which we had here a good opportunity of examining, are principally quartz, amethyst, and rock-crystal, horn-stone here and there, and a small portion of calcareous spar of a dark brown and of pearl colour. The metals are, pyrites or iron, arsenic, yellow copper, galena, gray and yellow blende, virgin gold and silver, sulphate of silver, both brittle and ductile, and *rosicler*, a rich silver ore of a bright rosy colour, which we did not see. This ore is so rare, that I could not meet with a specimen during my residence in Mexico. There are likewise veins with copper, lead, tin, cinnamon, antimony, and manganese; and the crystals of the carbonate of lime that are found in this mine, are very large and perfect.

"We next visited the principal shaft, San Josè, an octagon, the diameter 11 yards, and the perpendicular depth 600. This great work, which cost upwards of a million of dollars, is in some places blasted through solid rock, and in others walled up with hewn stone: the masonry is admirably well executed. The workmen threw bundles of lighted hay down the shaft, which blazed as they descended, and which we saw fall into the water, now not more than 250 yards from the summit, and rising every day. After failing in his attack on the city of Guanaxuato, Mina caused the machinery of the mine of Valenciana to be burnt, and the owners have not funds to renew it.

"From these mines we went to a shaft called Guadeloupe, where we found two *malacates* in operation. These machines are used to free mines from water, and to draw up the ore. A malacate is a drum of about ten feet in diameter, attached to a vertical spindle, a shaft of 15 feet long, which is shod with steel, and turns in steel sockets. Poles project at right angles from the shaft, to which the horses are harnessed. Two ropes are passed round the drum, and over pulleys supported by poles 12 feet high, and about 10 feet apart, leading to the well. As the drum turns, one rope descends, and the other is wound up, and raises a large skin full of ore, or buckets of water, by what the French call a *chapelet*. At the principal or octagonal shaft, eight malacates were kept constantly at work, night and day. Each malacate was moved by 12 horses, and drew up,

by a succession of buckets, 78 arrobas (975 quarts) every 9 or 10 minutes: 95,000 arrobas, or 31,800 cubic feet of water, might be raised by this means every 24 hours. It happened to be a sale day, and in the same court where the malacates were at work, we saw three or four hundred people collected; some exposing the ore to the best advantage, and others examining its quality. This mine is now worked by halves, the workmen receiving one-half of the profits, and the owners of the mine the other. The workmen were busily employed in arranging the pieces of ore in parallelograms, composed of small circular heaps of ore. They were very careful to place the richest pieces at top, and the fairest side in sight. When all was prepared, the salesman placed himself at the head of the first parallelogram; and the buyers, after examining the quality of the ore, whispered in his ear the price they were willing to give for it. When all had made their offers, he declared aloud the highest bid and the name of the purchaser. A note was made of the sale, and the whole party moved to the next parcel of ore, and so on, until the whole was disposed of. There are two sale days in the week, Wednesday and Saturday; and the weekly sales amount to between 5 and 6,000 dollars."

On the following day, our traveller set out to visit a *hacienda de plata*, belonging to the Conde de Valenciana, in the Canada de Marfil. "It is a spacious building, divided into three large courts; one for preparing the ores (*patio pa. beneficiar*,) and the others for horses and mules. The front is two stories high, very neatly built, and forms an excellent dwelling-house. From the house, we walked through the first court, where men and mules were treading out masses of mud, and entered a long range of buildings, where there were 35 mills at work grinding the ore. This hacienda, in prosperous times, works 70 mills. They resemble bark-mills. A circle of about 11 feet in diameter is paved with stones set up edgeways, and rubbed down to a smooth surface; in the centre of the circle an upright shaft moves in sockets. From this an axle projects, and passes through the centre of a millstone that rolls on its periphery: to the end of this axle the traces of the mules that turn it are attached. The first process is, separating the ore from the stones and refuse. Women are employed in this work. They throw aside the stones that have no ore, and with a hammer chip off small pieces of ore from those that have a little only on the surface. They perform this operation with great skill and great despatch. The ore is then placed on a thick iron plate, and is pounded by wooden pestles shod with iron, and moved by a horizontal shaft furnished with arms, like the movement of the pestles in our rice-mills. Two men, stationed one on each side, draw the ore from under the pestles upon plates that slope down from the top, and are perforated with holes so as to shift the ore as it falls on them. The large pieces are thrown back under the pestles. After the ore is broken into very small pieces, it is put into the mill, mixed with water, and ground to an impalpable powder. A small quantity of quicksilver is sometimes mixed with this mass while in the mill. From the mills, the ore, ground to a powder and moistened, is conveyed to the *patio pa. beneficiar*, the open paved court-yard; salt is then added in the proportion of about two pounds to every hundred weight of ore. If the mass, which is left untouched for several days, heats too rapidly, lime is added, which, the superintendant told us, cools it; if, on the contrary, it continues cold, *magistral* is mixed with it, in order to give it the

proper temperature. The *magistral* is a copper ore, or more properly a mixture of pyrites of copper and sulphuretted iron, which is roasted in a furnace, cooled gradually, and then reduced to a powder; a small quantity of salt is afterwards mixed with it. A small quantity of the powder magistral was put into my hand, and water poured upon it. The heat evolved was so great, that I was obliged to throw it away instantly; probably owing to the sulphuric acid acting upon the metals and disengaging heat. The next operation is, to add quicksilver to the mass, commonly six times the quantity which it is supposed the mass contains of silver. This mixture of ore, ground to a fine powder and moistened, of quicksilver, muriate of soda, and the sulphates of iron and copper, is made into an amalgam, by being trodden by mules, which are driven round for hours together; or by men, who tread the mass with naked feet. We saw both in one mass; twelve mules were trotting round up to their fetlocks in the mixture; and in another, ten men were following each other, and treading up to their ankles in it. The superintendant examines the appearance of the amalgam from time to time, by taking up a little of it in a wooden bowl, and adds either salt, quicksilver, or magistral, as he finds necessary to complete the amalgamation. This process is repeated every other day until a perfect amalgam is made, when it is conveyed into large vats filled with water. In the centre of the vat there is an upright shaft, furnished with arms and turned by mules, so as to stir up the ore and mix it well with the water. It is left to subside, and the water is let off gently, carrying with it a portion of earth, and leaving the amalgam, which is precipitated; this process is repeated until the amalgamation is freed from all extraneous matter. It is then moulded into triangles, which are placed under stout iron recipients of a bell shape, and the mercury is separated by heat, leaving the silver with a small portion of copper, not enough for the usual alloy.

"One of the grinding-mills, in which quicksilver had been added to the mass, was emptied and cleaned in my presence, in order to get out the amalgam, which is precipitated, and lodges in the interstices of the stones with which these mills are paved. After the floating mass was removed, the stones were scraped, and the crevices emptied. The contents were put into a wooden bowl and washed. This amalgam, besides silver, contains a large portion of gold. The ore of the mine of Valenciana contains some gold, which unites with the quicksilver, and this amalgam being so much heavier, is more quickly precipitated. The bars of silver made from these cleanings contain always the largest portion of gold, and are kept apart."

Mines of Zacatecas.] The mines of Zacatecas produce annually from 2,500 to 3,000 bars of silver, at 134 marks each, or from 2,19,866 to 268,839 lbs. troy. The value of this annual produce is from 2,847,000 to 3,417,000 dollars, or from £640,687 to £768,825 sterling; but the mineral produce of the mines of Zacatecas is not very constant. In 1770, their produce scarcely furnished 50,000 marks of silver annually to the mint at Mexico, or 32,815 lbs. troy; in a short time after, by the activity of Laborde, a French miner, their produce rose to 500,000 marks, or 328,150 lbs. troy annually, value 4,250,000 dollars, or £956,250 sterling. The mine of *Fresnillo*, in this intendancy, is very feebly wrought; and would produce much more, if wrought with vigour and skill. According to Sonnenshmidt, the rock is there traversed by innumerable veins, rich in grey and green muriated silver. The mines of *Sombrerete*, in this intendancy, are celebrated from the immense riches of the vein of the *veta*

grande, which in the space of a few months left to the family of Fagoago, a nett profit of more than 833,400 sterling.

Mines of Catorce.] The mines of Catorce, in the state of San Louis Potosi, are at present the richest in New Spain, after those of Guanaxuato. This mineral depository was only discovered in 1778. The small town of Catorce is situated amidst a group of arid and Calcareous mountains. The limestone is here traversed by a great number of small veins, very variable in their breadth and direction. The minerals which form the *gangue* are generally found decomposed, and are wrought with the mattock, the pick-axe, and the bore; so that the consumption of gunpowder is much less than at Guanaxuato and Zacatecas. Several of these mines were discovered in 1773, by two very poor individuals, and begun to be wrought, but the produce was small and variable. In 1778, a Spanish miner, named Zepeda, examined for three months this mountainous district, and was finally fortunate in finding the *crest* or surface of the great vein, on which he immediately dug the pit of Guadaloupe. He drew from it an immense quantity of muriated silver and *colorados* mixed with native gold, and gained in a short time more than 500,000 dollars, or £112,500 sterling. From that period the mine was vigorously wrought. That of *Padre Flores* alone, yielded the first year 1,600,000 dollars, or £360,000 sterling; but the vein only displayed great riches from 164 to 328 feet of perpendicular depth. The famous mine of *Purissima* has almost constantly yielded, since 1788, a nett profit of 200,000 dollars, or £45,000 sterling, to the proprietor; and its produce, in 1796, amounted to 1,200,000 dollars, or £270,000 sterling, while the expenses of working only amounted to 80,000 dollars, or £18,000 sterling. This vein sometimes reaches the extraordinary length of 131 feet, and was wrought in 1802, to the depth of 1,574 feet. Since 1798, the value of the minerals at Catorce have singularly diminished, and the native silver is now rarely seen; and the *mitates Colorados*, which are an intimate mixture of muriated silver, earthy carbonated lead, and red ochre, now begin to give place to pyritous and coppery minerals. The actual produce of these minerals collectively, at the period of Humboldt's visit, was still 400,000 marks, or 262,525 lbs. troy annually, or £765,000 sterling. Since that period, however, these rich mines have become filled with water. "In order to render them once more productive," we are told, "the owners, the family of Obregon, have made an arrangement with an English commercial house, by which they agree to give up one-half of their right and title, on condition of having them freed from water. For this purpose, a steam-engine of one hundred horse power has been brought from England. It is said that coal has been discovered not far from this mine.

Mines of Pachuca.] The mines of *Pachuca*, *Real de Monte*, and *Moran* are famed for their antiquity, wealth, and promixity to the capital. The working of the mines of Moran, have only been resumed within these few years; and the mineral depository of Pachuca, one of the richest in all America, has been wholly abandoned since a terrible fire which took place in one of the mines. A similar misfortune befell the mines of Bolanos, in 1787, which were accordingly stopped, and begun only to be cleared out in 1792. The mines of Real de Monte consist of four principal veins, called Biscaina, Rosario, Cabrera, and Encino, running through the districts of Real de Monte, from Moran and Pachuca, at extraordinary distances, without changing their direction, and almost coming in contact with other veins which traverse or derange them.

Biscaina Vein.] The *La Biscaina* vein, though not so extensive as that of Guanaxuato, is perhaps still richer, and was successfully wrought from the 16th to the beginning of the 18th century. It extends from 20° 5′ to 20° 15′ N. lat., and from 100° 45′ to 100° 52′ W. long. In 1726 and 1727, the two mines of *Biscaina* and *Xacal* still produced together 542,700 marks, or 356,182 lbs. troy of silver,—value in dollars 4,672,950,—in British money, £1,037,913 15*s.* sterling. The mining operations, however, were abandoned, from the great quantity of water, and the comparative ignorance of the methods of drawing it off. A level of nearly a mile was then cut through the solid rock over three different veins (one of which amply repaid the expense), and finished in 1762, by the count de Regla. This personage had drawn, in 1774, a nett profit of more than £1,041,750 sterling, from the mine of Biscaina. But the profits declined after that period. Instead of cutting galleries of investigation to discover the vein on a great extent, they continued sinking operations to a depth of 317 feet below the level. At that depth the vein preserved its great wealth in sulphurated silver, mixed with native silver ; but the water increased to such a degree, that 28 *baritels*, each requiring 40 horses, were unable to draw it off. In 1784, the weekly expense amounted to £1,875 sterling. After the death of the count de Regla, the works were suspended till 1791, when the baritels were again re-established. The expense of these machines, which draw up the water, not by means of *pumps*, but by *bags* suspended to ropes, amounted to more than £31,252 sterling annually. They at length reached the bottom of the mine, but the minerals which they found did not pay the expense, and the mine was abandoned in 1801. The present proprietor very wisely left off the clearing of the old works, and examined the mineral depository in points where it had never yet been worked. In 1798, very rich minerals were discovered, at a distance of 1640 feet to the E. and W. of the centre of the old works. Two pits were then sunk, and it was discovered that the vein of La Biscaina here resumed its richness, and that an immense field was opened for new undertakings. In its present state, the mine of the count de Regla yields annually 60,000 marks, or 39,378 lbs. troy of silver, value 510,000 dollars, or £114,750 sterling annually.

Mines of Zimapan.] The produce of Zimapan, and other mines in the intendancy of Mexico, is 120,000 marks, or 78,756 lbs. troy, value 1,120,000 dollars annually, or £229,500 sterling. The group of *Tasco*, in the same intendancy, yields 260,000 marks, or 170,000 lbs. troy, value 2,210,000 dollars, or £497,250 sterling. The annual produce of the mines of *Bolanos*, is 230,000 marks, amounting to 1,955,000 dollars, or £439,875 sterling annually.

Mines of Durango.] The mineral district of Durango yields annually 400,000 marks, or £765,000 sterling. The groups of *Chihuahua* and *Oaxaca*, are estimated to produce 130,000 marks of silver annually, or 1,115,000 dollars, or £248,625 sterling. In the vicinity of Chihuahua, according to Pike, are 13 silver mines, one of gold, and one of copper ; and at *Mauperne*, seven silver mines and one gold mine. The mineral must be very rich at Chihuahua, as one of the proprietors told Pike that his mine produced 13½ dollars of pure silver per cwt.

The total produce of the Mexican mines till the commencement of the 18th century, did not exceed the average annual amount of 600,000 marks of gold and silver ; so that we may infer, that in the 16th century, comparatively little activity was displayed in working the mines. The veins of

Tasco, Tlapujahua, Zultepeque, Moran, Real de Monte, Sombrerete, Bolanos, Batopilas, and Rosario, have occasionally afforded immense wealth, but their produce has been less uniform than that of the mines of Guanaxuato, Zacatecas, and Catorce.

Quantity, &c. of Metal.] The silver extracted in the 37 districts of mines was deposited in the provincial treasuries of the intendancies; and it is from these receipts that we must judge of the quantity of silver furnished by the different mines. From 1785 to 1789, there were received in the deposits of eleven provincial treasuries, the following quantities of silver, valuing the marks at 8½ dollars each.

	Marks.	*Dollars.*	*Sterling money.*
Guanaxuato,	2,469,000	20,986,500	L.4,721,962 : 10*s*
San Louis Potosi,	1,515,000	12,877,500	2,897,437 : 10*s*
Zacatecas,	1,205,000	10,242,500	2,304,587 : 10*s*
Mexico,	1,055,000	8,967,500	2 017,937 : 10*s*
Durango,	922,000	7,835,778	1.763,150
Rosario,	668,000	5,678,000	1,277,450
Guadalajara,	509,000	4,326,500	973,462 : 10.
Pachuca,	455,000	3,867,500	870,187 : 10*s*
Bolanos,	364,000	3,094,000	696,150
Sombrerete,	320,000	2,720,000	621,000
Zimapan,	218 000	2,108,000	474.400
Totals,	9,730,000	82,705,000	L. 18,608,625

As to the exact quantity of gold and silver extracted from the mines of New Spain, since its conquest by Cortez, it is impossible to judge with precision. Approximation to truth is the utmost that can be attained on this subject. The archives of the mint at Mexico, which contain accurate accounts of the quantity of the precious metals coined in New Spain, go no farther back than to the year 1690; any knowledge, therefore, of the quantity coined previous to that period must be entirely conjectural. From these archives, Humboldt has presented his readers with two tables: one expressing the value of the gold and silver coined from 1690 to 1806, in double piastres or dollars,—the other indicating the quantity of silver in marks given into the mint and converted into dollars. These tables, embracing a series of 117 years—namely, from 1690 to 1806—may be divided into 12 divisions, the last containing 7 years, the others 10 years each, as follows:

GOLD AND SILVER COINED AT MEXICO FROM 1690, to 1806, IN DOLLARS AND POUNDS STERLING.

Periods.	*Dollars.*	*Pounds sterling.*
1690 to 1399	43,871,335	9,871,050 : 7 : 6*d*.
1700 — 1709	51,731,034	11,639,482 : 13*s*.
1710 — 1719	65,747,027	14,793,081 : 1 : 6*d*.
1720 — 1729	84,153,223	18,934,475 : 3 : 6*d*.
1730 — 1739	90,529,730	20,369,189 : 5*s*.
1740 — 1749	111,855,040	25,167,384
1750 — 1759	125,750,094	28,293,771 : 3*s*.
1760 — 1769	112,828,860	25,386,493 : 10*s*.
1770 — 1779	165,181,729	37,165,889 : 0 : 6*d*.
1780 — 1789	193,504,557	43,538,524 : 13*s*.
1790 — 1799	231,080,214	51,993,048 : 3*s*.
1800 — 1806	153,128,877	34,453,997 : 6 : 6*d*.
	1,429,361,717	321,606 386 : 6 : 6*d*.

ANNUAL AVERAGE IN DOLLARS AND POUNDS STERLING OF GOLD AND SILVER COINED AT MEXICO FROM 1690 to 1806.

Periods.	*Dollars.*	*Pounds sterling.*
1690 to 1699	4,387,133.5-10ths.	987,105 : 9*d.*
1700 — 1709	5,173,103.4-10ths.	1,163,918 : 5 : 3¾*d.*
1710 — 1719	6,574,702.7-10ths.	1,479,308 : 2 : 1¾*d.*
1720 — 1729	8 415,322.3-10ths.	1,893,447 : 10 : 4¼*d.*
1730 — 1739	9,052,973	2,036,918 : 18 : 6*d*
1740 — 1749	11,185,504	2,516,738 : 8*s.*
1750 — 1759	12 575,009.4-10ths.	2,829,377 : 2 : 4*d.*
1760 — 1769	11,282,886	2,538,619 : 7*s.*
1770 — 1779	16,518,172.9-10ths.	3,716,588 : 18 : 1*d.*
1780 — 1789	19,350,455.4-10ths.	4,353,852 : 9 : 4*d.*
1790 — 1799	23,108,021.4-10ths.	5,199,304 : 16 : 4*d.*
1800 — 1806	21,875,553.6-7ths.	4,921,999 : 12 . 4¼*d.*
	12,216,766.95-117ths.	2,748,772 : 4 : 2½*d.*

The figures at the foot of the second column denote the annual average of 117 years in dollars; and those at the foot of the third column, the same in pounds sterling. It is to be observed, that the last period contains only seven years, namely, from 1800 to 1806. The three last years of this period produced 75,909,697 dollars, or an average of 25,303,232⅓ dollars, exceeding the period of 1765-6-7 by 591,612 dollars, or 197,204 dollars annually. The quantity of silver alone produced from the mines of Mexico, from 1690 to 1800 inclusive, amounts to 149,350,721 marks, or 98,008,212 lbs. troy, value 1,269,481,128½ dollars, or £285,633,253 16*s.* 6*d.* sterling. From the first of January, 1772, when the great increase first took place in the mines of New Spain, to the 31st December, 1806, the coinage of gold and silver amounted to 724,441,916 dollars, namely, 696,107,230 dollars, or 81,657,515 marks silver, value in British money £156,730,231 15*s.* sterling, and 28,337,686 dollars, or 208,366¾ marks gold; value in British money £5,667,537 4s. sterling: total, £162,397,768 19*s.* averaging £4,639,933 7*s.* 10¼*d.* sterling, or 20,698,423⅐ dollars annually, and the quantity of gold produced as 1 to 390. But this statement of Humboldt's, however clear and satisfactory, respecting the enormous increase of the Mexican mines, is far below the calculation of Pike, who affirms, that the coinage of silver in the Mexican mint is 50,000,000, and of gold, 14,000,000 of dollars annually,—being a total of 64,000,000 of dollars, or about three times more than the truth, and one-half more than all the gold and silver produced in all America together. Mr Ward computes, that in the 15 years between 1810 and 1825, the annual produce of the Mexican mines did not exceed 10,000,000 of dollars, or about two-fifths of what he considers to have been their average produce during the 15 preceding years. As to the quantity of gold and silver coined before 1690, in Mexico, conjecture is all that we can produce. Humboldt estimates the quantity produced from the mines of Tasco, Zultepec, Pachuca, and Tlapujahua—the only mines wrought from the conquest of Mexico in 1521 to 1548—at 40,500,000 dollars, or £9,112,500 sterling. The mines of Zacatecas being discovered in 1548, and those of Guanaxuato in 1558, Humboldt calculates the produce at 2,000,000 dollars annually, from 1548 to 1600; and at 3,000,000 dollars annually, from 1600 to 1690: total from 1548 to 1690, 374,000,000 dollars, or £84,150,000 sterling. This added to 40,500,000 dollars, as the produce of the Mexican mines, from 1521 to 1548, gives 414,500,000 dollars, or £93,262,500 sterling,

as the total produce of the registered gold and silver previous to 1690; and this added to the registers of the Mexican mint from 1690 to 1806, gives 1,843,861,697 dollars, or £424,868,886 6s. 6d. sterling, as the whole registered produce from 1521 to 1806. As to gold and silver which is not registered, and does not pay the duty to the king—or is, in other words, smuggled—it is impossible to say what proportion it bears to the registered produce; some estimating it at one-third, and others at one-half of the whole produce. The contraband trade was very considerable in Mexico till the middle of the 18th century. Since that time it has declined, and the quantity of unregistered silver embarked at Vera Cruz and Acapulco—the only two ports of consequence in Mexico—is estimated, according to all the information which Humboldt could obtain, at 800,000 dollars annually,—and the plate exported at Vera Cruz, at 30,000 marks, or 255,000 dollars more,—total, 1,055,000 dollars annually, or a twenty-third part of the registered annual produce. The whole quantity of smuggled produce from 1521 to 1806, is computed at one-seventh by Humboldt, or 263,408,814 dollars, or £59,566,983 3s. sterling, making the total of gold and silver, registered and unregistered, extracted from the Mexican mines, from 1521 to 1806, amount to 2,107,270,511 dollars, or £484,435,869 9s. 6d. sterling.

Previous to the revolution, all the metallic wealth of New Spain was in the hands of individuals, the government was not even proprietor of the great levels, as several of the European sovereigns are. The individuals received from the king a grant of a certain number of measures on the direction of a vein or bed; and they were only held to pay certain duties on the minerals extracted from the mines. These duties were one-tenth of the mineral produce, a duty of one per cent., and the duty of coinage. This last duty, established in 1586 by a law of Philip II., and increased at the end of the 17th century, latterly amounted to 3½ reals, or very nearly 2s. per mark of silver. If the duties of coinage and seigniorage be deducted, the proprietors paid only 11 per cent. on the produce of their mines. In speaking, however, of duties paid by the proprietors of mines, these on pure silver must be carefully distinguished from those on silver mixed with gold; for if the silver contained less than 30 grains of gold per mark of silver, the mint did not pay the gold to the proprietor or individual. For an ingot of silver, weighing 135 marks, unmixed with gold, and valued at 1,171 dollars, 6 reals, or £263 5s. 11d. the duties of one-tenth, one per cent., of assaying, of *bocado* levied in the treasury, and of seigniorage, amounted to 147 dollars in whole, or £33 1s. 6d., which left to the proprietor the nett sum of 1,024 dollars, 6 reals, or £230 4s. 5d. If the silver was smelted, the expenses of affinage must be added, amounting to 8 maravedis per mark, or 1s. 5d. to the above sum. For an ingot of auriferous silver, weighing 133 marks, 2 ochavas, and containing in silver 1,133 dollars, 3 reals, and in gold 194 dollars, or 1,327 dollars, 3 reals, in whole, the following duties were to be paid, namely:

	Dollars.	*Real*
Duty of one per cent. and tenth,	123	6
Duty of three per cent. on gold,	5	6
Duty of assaying,	6	0
Duty of bocado,	1	4
Apartado,	91	7
Consumo,	12	2
Seigniorage,	13	2
	254	2
Remaining to the proprietor,	1,073	

If the ingot was so rich in gold that it contained more than one-half of its weight of that metal, the duty of assaying rose to four reals, or 2*s.* 3*d.* per mark.

The produce of the Mexican mines would be much more abundant, and be attended with much less expense, were the skill of the miners equal to those of Europe. The most obvious defects in the management of the mines have hitherto been the clumsy, imperfect, and expensive manner of clearing them from water,—the want of arrangement in the disposition of the galleries,—and the absence of lateral communications, which add to the uncertainty, and increase prodigiously the expense of working the mines. No plan of the galleries was formed; and no contrivances were used for abridging labour, and facilitating the transport of materials. When new works were undertaken, they were often begun without capital, and always conducted on a scale too large and expensive.

Yet from what has been stated respecting the progressive increase of the Mexican mines, notwithstanding the comparative want of mineralogical skill, the waste of mercury, and ignorance of machinery displayed in the mining operations, it is easy to infer that the mineral produce of New Spain has not yet obtained its maximum. Under a better government, and a more industrious population, the produce of New Spain would exceed that of all America put together, in Humboldt's opinion. It is believed that New Spain produces only one-third of the precious metals which it would do under happier political circumstances. This opinion was formally announced by the deputies of miners, in a petition presented to the king in 1772; and now that the Mexicans have succeeded in establishing their independence, there is little doubt but that, freed from the paralyzing influence of the mother-country, a great increase of mineral produce will be the result of the unfettered energies of the colonists, aided by European skill and capital, which has already begun to flow in this direction, many millions of British capital having been invested in these mines in 1825 and 1826.

As to the number of persons employed in the mines, it is far less than is commonly supposed. The whole number employed in the mining-districts of Guanaxuato did not exceed, when Humboldt wrote, 5,000 persons of every description; and all the miners in New Spain, under the various appellations of *barenadores, tacneros, tenateros,* and *bareteros,* was not above 30,000, or 1-200th of all the population. The labour of the mines is perfectly free, and no trace of the *mita,* or barbarous law which compelled the Indians to remove from their homes to labour in the mines, remains, though Dr Robertson has advanced the contrary. It is absolutely false, (says Humboldt,) also, that galley-slaves are sent from Spain to America, to labour in the mines. The Mexican miner is the best paid of all miners, gaining at the least from £1 2*s.* 6*d.* to £1 4*s.* 9*d.* weekly, while those of the common labourer do not exceed a dollar and a half. The tenateros, or persons who carry the ore on their backs, from the place where it is dug out of the mine to the place where it is collected in heaps, receive 4*s.* 10*d.* per day, of six hours labour. The labour, indeed, is very severe, as they are loaded with from 225 to 350 lbs. weight of mineral, with which they ascend eight or ten times successively, without halting, stairs of 1,800 steps; but the appearance of these robust Indians completely refutes the assertions of Raynal, Pauw, and a number of other philosophical dreamers, who have declaimed so pathetically upon the degeneracy of the human species in the torrid zone. The most un-

healthy part of the subterraneous labour is that of the barenadores, or blowers, who explode the rock with powder. These rarely pass the age of 35, if from a thirst of gain they continue their labour for the whole week.'

The art of amalgamation was introduced into Mexico by Medina, a miner of Pachuca, and various methods have been successively introduced to improve it. They are, however, far behind the miners of Europe in the science of amalgamation; and the waste of mercury is immense, being in general from 12 to 14 ounces of mercury for every mark of silver which is extracted,—or eight times more in proportion than what is consumed in Saxony, which is only from $1\frac{1}{2}$ to $1\frac{3}{4}$ ounces to the mark of silver. There the silver is extracted from the ore in 24 hours, whereas in New Spain from 60 to 150 days are employed in the same process. The annual consumption of New Spain, when Humboldt wrote, was 16,000 quintals, or 2,100,212 lbs. troy of mercury, the price of which in New Spain was £155,000 sterling. Almaden in Spain alone furnished, in 1802, 20,000 quintals of mercury to the American mines; but as the mines of Almaden could not, in ordinary cases, supply all the mercury requisite for amalgamation, the residue was made up by the mines of Idria, in Carniola. In 1784, a contract was made with the emperor of Austria, by the court of Spain, by which the former was to furnish mercury at the rate of 52 dollars per quintal. Before 1770, when the working was far from being so considerable as at present, the mercury was wholly obtained from Huancavilica, in Peru; and the German quicksilver was only introduced into Mexico after the falling in of the mine of Huancavilica, and the inundation of the mine of Almaden, in Spain. From 1762 to 1781, the quantity of mercury destroyed in the amalgamation of the Mexican mineral amounted to 191,405 quintals, or 25,121,200 lbs. troy, the value of which, in Mexico, was upwards of £2,400,000 sterling. The working of the mines is regulated by the price and quantity of the quicksilver. In 1590, its price was 187 dollars per quintal; but in 1750, it was distributed by the court of Madrid, to the miners, at the rate of 82 dollars per quintal. Between 1767 and 1776, its price was at 62 dollars per quintal. In 1777, through the influence of Galvez, the viceroy of Mexico, and to whom America is indebted for the partial enlargement of her trade, the price of mercury was reduced to 41 piastres, 2 reals per quintal of Spanish mercury; and 63 dollars per quintal of German mercury. An attempt was made to procure mercury from China, in 1782, but it miscarried. The Chinese mercury procured at Canton was very small, of impure quality, containing a great deal of lead, and its price 80 dollars per quintal. Humboldt is of opinion, that there are mines of cinnabar in New Spain and New Granada, as well as in Peru, sufficient to answer the home-demand. Only two mines, however, of cinnabar were wrought in New Spain while Humboldt was there, and the produce was but small. It is impossible to judge what quantity of mercury the various mines enumerated by him are capable of yielding, till they are more carefully wrought, or more rigidly examined. It is probable that, if all the mines were wrought at once, and if a more economical use of mercury in amalgamating were adopted, in proportion as chemical and mineralogical science should advance in Mexico, that the colonists will be rendered wholly independent of Europe for the supply of mercury.

Gold Mines.] The Mexican gold is for the most part obtained from alluvious grounds, by means of washing. These grounds are common in

the state of Sonora. In the plain of Cineguilla, grains of gold of such a size were found, at the depth of 19 inches from the surface, that some of them weighed nine marks each, equivalent in value to £285 8*s*. sterling. In the mines of *Yecorata*, in Cinaloa, a piece of gold was found, which weighed 16 marks, 4 ounces, and 4 ochavas, value £540 sterling, which was sent to the royal cabinet at Madrid. *Pepitas* of pure gold have been found in Pimeria Alta, in 31° N. lat., weighing from 5 lbs. 2 oz. 2 dr. 2 scr. 8 gr. to 8 lbs. 4 dr. 12 gr. But the frequent incursions of the warlike savages, the excessive high price of provisions in this uncultivated country, and the want of water necessary for working, are all great obstacles to the extraction of gold in this place. Another, but the smallest portion of Mexican gold, is extracted from the veins which intersect the mountains of primitive rock, particularly in the intendancy of Oaxaca, either in gniess, or in micaceous schist. This last rock is very rich in gold, in the celebrated mines of *Rio San Antonio*. These veins, of which the *gangue* is milky quartz, are more than 1 foot 6 inches thick, but their richness is very unequal. The same metal is also to be found, either pure or mixed with silver ore, in the greatest number of veins which have been wrought in Mexico, and there is scarcely a single silver mine which does not contain some gold. Native gold is also frequently found crystallized in a reticulated form, in the silver mines of *Villalpando* and *Rayas*, near Guanaxuato; in those of *Sombrero*, in the intendancy of Valladolid; *Guarisamey*, to the west of Durango; and *Mesquital*, in Guadalajara. The gold of Mesquital is deemed to be the purest, as being least alloyed with silver, iron, and copper. The principal vein in the mine of Villalpando, is intersected by a great number of small *rotten* veins of exceeding richness. The argillaceous or clayey slime with which these veins are filled, contain so great a quantity of gold, disseminated in impalpable parcels, that the miners are compelled, when they leave the mine nearly naked, to bathe themselves in large vessels, to prevent any of the auriferous clay from being carried off by them on their bodies.

Inferior Minerals.] Having finished the account of the precious metals, we now come to what are called the common metals. Copper is found in a native state, in the mines of Ingara, to the S. of the Volcan de Jorullo; and at San Juan Guetamo, in the province of New Mexico. These last are situated in N. lat. 34°, in a mountain belonging to the Topian chain, to the W. of the Rio del Norte. The copper produced here amounts to 20,000 mule loads annually, furnishing that article for the manufactures of nearly all the internal provinces. The intendancy of Guanaxuato produced, in 1802, nearly 9,200 arrobas, or 230,000 lbs. of copper, and 400 arrobas, or 10,000 lbs. of tin. Tin is also pretty abundant in the internal provinces, where a number of valuable mines of this mineral are situated in the vicinity of Durango. The iron mines are very abundant in the intendancies of Valladolid, Zacatecas, and Guanaxuato, but especially in the internal provinces. Lead abounds in the calcareous mountains in the north-east of the viceroyalty, especially in the district of Zimapan, near the Real de Cardonal and Lomo del Toro; near Linares, in the kingdom of new Leon, and in the province of Santander. At Lomo del Toro, masses of *galena* are wrought, of which some *nests* have yielded, in a short space of time, according to Soninschmidt, more than 124 quintals of lead. Zinc is found under the form of brown and black blende, in the veins of Ramos, Sombrerete, Zacatecas, and Tasco. Antimony is common to Catorce and Los Pozuelos. Arsenic is found among the

minerals of Zimapan, combined with sulphur, like orpiment. Cobalt has never yet been discovered; and manganese is much less abundant in equinoctial America, than in the temperate climates of the old world. About 100 miles to the south of Chihuahua, an entire mountain of load-stone, or magnetic iron, has been lately discovered. The strata are as regular as those of limestone.

That most useful of all minerals, coal, is very rare in New Spain. It has hitherto been only discovered in New Mexico; but it is, however, probable, that it may be found in the secondary lands extending to the north and north-west of the Rio Colorado of Texas, as well as in the plains of the latter, and those of San Louis Potosi. There is already a coal mine near the source of the Sabine river. In general, coal and rock-salt abound to the west of the dividing ridge that separates the waters flowing into the Mississippi, (Missouri,) and the gulf of Mexico, from those that descend to the gulf of California. In the whole inhabited part of New Spain, there is no rock-salt equal to that of Zepaguera, in New Granada, or of Wielieczka, in Poland. The muriate of soda is no where disseminated in masses or banks of considerable volume, and is merely disseminated in the clayey lands which surmount the ridge of the Cordilleras: so that, in this respect, the table land of Mexico resembles that of Tibet or Tartary. The most abundant salt-mine of Mexico, is the lake of the Penon Blanco, in San Louis Potosi, of which the bottom is a bed of clay, containing from 12 to 13 per cent. of the muriate of soda. Were it not, however, for its use in the amalgamation of silver minerals, the consumption of salt would be very inconsiderable in Mexico, the Indians preferring their old custom of seasoning meat with *chili*, or pimento. The Indian consumption of salt cannot be estimated at much more than half a kilograme per head, or only one-twelfth of that in Europe. These liquid minerals, amber and asphalt, likewise occur in New Spain.

Among the precious stones, a few diamonds are found, with amethysts and turquoises, but the list is imperfect, and perhaps erroneous. The mountains produce jasper, marble, alabaster, magnets, steatite, jad, and talc. The fine marble of Puebla is found within a few leagues of that city. One kind, that of Tecali, is translucent, like the alabaster of Volterra, and the phengites of the ancients. Near Santa Fé, a stratum of talc is found in some of the mountains, so large and flexible as to admit of being subdivided into thin cakes, of which the greatest proportion of the houses in Santa Fé, and all the villages to the north, have their window lights made.

Among the most singular fossils, are the bones of the mammoth, mentioned by Estalla. On digging the foundation of the convent of Guadaloupe, these bones were found lying upon sand, in different parts, at the depth of 12 feet. Similar bones were found in the hill Tepeyac. A tusk found at Guadaloupe measured ten feet in length.

Basaltic rocks.] The valley of Mexico is separated from the basin of *Totonilco el Grande* by a chain of porphyritic mountains, the highest summit of which, the peak of the Xacal, rises to an elevation of 10,248 feet above the level of the sea. These "enormous columns of trappean porphyry," crowned with pines and oaks, are of a very picturesque character: it is from them that the ancient Mexicans obtained the *itzli*, or obsidian, of which they formed their sharp instruments. This porphyritic formation serves for base to the porous amygdaloid which surrounds the lakes of Tezcuco, Zumpango, and San Christobal. To the north-east of

the district of Real del Monte, it is concealed under the columnar basalt of Regla, and further on, in the valley of Totonilco, under beds of secondary formation. The Alpine limestone, of a greyish blue, in which is the famous cavern of *Dante*, called "*the pierced mountain*," or "the bridge of the Mother of God," (*puente de la Madre de Dios,*) appears to repose immediately on the porphyry of Moran.

The basaltic rocks and cascade of Regla form one of the most remarkable natural curiosities in Mexico. "The cascade of Regla," says Humboldt, "is situated at a distance of 25 leagues N.E. from Mexico, between the celebrated mines of Real del Monte and the thermal waters of Totonilco. A small river, which moves the wheel of the amalgamation-mill at Regla, forces its way across the groupes of basaltic columns. The sheet of water that rushes down is considerable, but the fall is not above 25 feet. The surrounding rocks, (which remind us of the cave of Fingal at Staffa, in the Hebrides,) the contrasts of vegetation, the wild appearance, and the solitude of the place, render this small cascade extremely picturesque. On both sides of the ravine, the basaltic columns rise to more than 100 feet in height, and on them grow tufts of cactus and *yucca filamentosa*. The prisms have generally five or six sides, and are sometimes as much as from three to four feet in breadth: several present very regular articulations. Each column has a cylindrical nucleus, of a denser mass than the surrounding parts: these nuclei are as it were enchased in the prisms, which, in their horizontal fracture, offer very remarkable convexities. This structure, which is also found in the basalts of Fairhead, is shown in the foreground of the drawing, towards the left. The greater part of the columns are perpendicular: though some very near the cascade have an inclination of 45° towards the east, and further on, there are others horizontal. Each groupe, at the time of its formation, appears to have followed particular attractions. The mass of these basalts is very homogeneous. The prisms repose on a bed of clay, under which is again found basalt, superposed on the porphyry of Real del Monte. The whole of this basaltic region is 6,500 feet above the level of the ocean."

CHAP. V.—POPULATION AND NATIVE TRIBES.

WHENCE,—and in what way the American continent was originally peopled,—are questions which have never yet been satisfactorily answered. If the geological constitution of America be attentively examined, the opinion that it is a continent more recently formed than the rest of the globe must be abandoned. The same succession of stony strata are found no less in the new world than in the old world. At a height superior to Mont Blanc, petrified sea-shells are found on the summits of the Andes. The fossil bones of elephants are spread over the equinoctial regions of a continent where living elephants do not exist; and these bones are not found merely in low plains, but in the coldest and most elevated regions of the Cordilleras; here, then, as well as in the old world, generations of animals, long extinct, have preceded those which now exist on the surface of the earth. The comparative thinness of the population of America is no proof that it has been but recently peopled; for the regions of Central Asia are as thinly peopled as the savannahs of New Mexico and Paraguay. The fact is, that the problem of the first population of most countries, is nearly as difficult to solve as that of America; and for the same plain rea-

son, that the first peopling of a country is an event generally far beyond the period of its history. If we may judge from the number of languages spoken in South and Central America, the number of native tribes must be great. These languages exceed 20,—14 of which have grammars and dictionaries, namely, the *Mexican* or *Aztec* language, spoken by the Toltecs, Chichimecs, Acolhuecs, Nahuatlacs, and Aztecs, thus indicating an identity of origin. This language is the most widely diffused of all the Mexican languages, extending from 37° N. lat. as far south as the lake of Nicaragua,—a distance of more than 1,200 miles. The other languages, indicating as many different tribes, are the *Otomite*, *Tarasc*, *Zapotec*, *Mistece*, *Maye* or *Yucatan*, *Totonac*, *Popolouc*, *Matlazing*, *Huaste*, *Mixed*, *Caquiquil*, *Taraumar*, *Tepehuan*, and the *Cora*. The most part of these languages are as different from each other as Greek is from German, or French from Polish; and therefore, supposing that we could trace the origin of the race speaking the first of the above languages—namely, the Aztec—this would be no clue to discover the origin of the other native races, some of which were in New Spain long before the appearance of the Toltecs. It seems to be generally believed, that the *Toltecs*, *Chichimecs*, *Acolhuecs*, *Nahuatlacs*, and *Aztecs*, are totally distinct races from the other native tribes, and to be of Asiatic origin.

Of these five tribes, subdivided into a great many others, the *Toltecs* first made their appearance 50 miles to the east of the city of Mexico, in 648. They said that they had been expelled from a country lying to the N.W. of the Rio Gila, and called by them *Huehuetlapallan*. The date of their emigration is fixed in the Mexican paintings—which describe year by year the events of this migration—at 544 of our era, or 104 years before their settlement in Mexico; and it is very remarkable that this epoch of 544, corresponds with the ruin of the dynasty of Tsin in China, which caused such great commotions among the nations of eastern Asia.

About 100 years after the Toltecs had left Huehuetlapallan, the *Chichimecs* took possession of it. These were a much more rude and unpolished tribe than the Toltecs, and came from an unknown country, called by them *Amaque Mecan*, far to the N. of Huehuetlapallan, where they had resided for a long time. They employed eighteen months in their migration to the ancient seat of the Toltecs. After remaining five centuries in Huehuetlapallan, they migrated to the south, and appearing in Mexico, in 1170, mingled with the Toltecs.

The *Nahuatlacs* made their first appearance from the north, in 1196, in Mexico.

The *Aztecs*, the immediate progenitors of the Mexicans, dwelt in a country called *Aztlan*, to the N. of the Californian gulf, in 1160. How far to the north of this parallel Aztlan lay, it is impossible to determine; but we are certain that it lay north of the Rio Colorado of California. It is probable that the original abode of the Aztecs, or Aztlan, lay beyond Nootka sound, between it and Cook's River, especially under the 57th degree of N. lat. in Norfolk Bay and New Cornwall, where the natives have a strong predilection for hieroglyphical paintings, like the Mexicans. After a migration of 56 years, distinguished into three grand periods, the Aztecs arrived in the valley of Mexico in 1216. The first stage of their migration was to the south of the Rio Nabajoa, in 35° N. lat. The second stage was to the south of the Rio Gila, in N. lat. 33° 30′, where the ruins of an ancient city, called Las Casas Grandes, by the Spaniards, was discovered in 1773, in the midst of a vast and beautiful plain, one

league to the south of the Gila. These ruins occupy a space of three square miles; and the whole surrounding plain is filled with fragments of Mexican stone ware, beautifully painted in red, white, and blue. The third station was in the vicinity of Yanos, in New Biscay, in N. lat. 30° 30′, and 350 miles S.E. of Las Casas Grandes. They moved hence to Hueicolhuican or Culeacan, where the Aztecs, originally composed of 6 tribes, were abandoned by five of them, namely, the *Xochimilcas, Tepanecas, Chalcese, Tlahuças*, and *Tlascaltecs*. The cause of this separation is not known. The remaining tribe was rent into two violent factions; which however still travelled together to the south, in order to enjoy the company and protection of their imaginary god. Wherever they stopped, an altar was erected to him; and at their departure, they always left behind all their sick, under the charge of others to take care of them. At last, in 1216, they arrived at Zumpanco, a considerable city in the vale of Mexico, where they were very kindly received by the lord of that district, who not only assigned them habitations, but even took a wife from them for his son; and from this marriage all the Mexican kings descended. Restless, however, and dissatisfied with their condition, they still migrated from place to place, along the lake of Tezcuco. In 1245, they arrived at Chapoltepec, within two miles of the future site of Mexico. Here, harassed by the petty kings of Zaltocan, or the Chichimec sovereigns, they retired to a small group of small islands, called Acocolco, at the southern extremity of the lake, where they lived for 52 years in great misery, being compelled to satisfy their wants with aquatic plants, insects, and an unknown species of reptile, called axolotl. Reduced to slavery by the princes of Acolhuacan or Tezcuco, they were again forced to abandon their abode in the midst of the lake, and take refuge on the continent, at Tizapan, and next at Iztacalco. Thence they removed to the little islands to the E.N.E. of Chapoltepec, in the western end of the lake, in obedience to an order of the oracle of Aztlan. An ancient tradition preserved amongst them bore, that the limit, or final term of their migration was to be a place where they should find an eagle sitting on the top of a nopal shrub, the roots of which penetrated the crevices of a rock. This nopal was seen by the Aztecs, in the year 1325, 165 years after their first migration from Aztlan, and 109 years from their first appearance in the vale of Mexico, on a small island, which served for a foundation to the Teocalli, or the house of their god, afterwards called by the Spaniards the great temple of Mexitli. With the building of this rude temple commenced the foundation of the city of Mexico, signifying in the Aztec language, 'the habitation of the God of War;' and with it commenced the dynasty of the Mexican kings, and ended the migration of the Az tribe.

In the northern provinces, as New Biscay, Sonora, and New Mexico, there were few inhabitants in the 16th century; and these were not agricultural tribes, as the Toltecs and Aztecs, but hunters and shepherds. These withdrew farther to the north, in proportion as the European conquerors advanced in that direction, yielding to them their uncultivated savannahs which served for pasturage to the buffaloes, just in the same manner as the Indians in the United States are gradually retiring westward. Agriculture alone attaches man to the soil, and developes the love of country; while the hunting and pastoral tribes retreated beyond the Gila, towards the Colorado, and the inaccessible mountains which partly divide and partly bound New Mexico, the Aztec colonists patiently en-

dured the cruel treatment of their conquerors, and suffered every thing, rather than quit the soil which their fathers had cultivated.

Manners and Customs of the Ancient Mexicans.] The Mexicans are described as being generally of a good size, and well proportioned. They have narrow foreheads, black eyes, and regular white teeth; their hair is black, thick, coarse, and glossy. They have little or no beard, and no hair upon their arms, thighs, or legs. Their skins are a kind of olive or copper-colour. Few among them are deformed, and many of the females are beautiful. They dress their hair in various fashions, and use different kinds of paints.

Those of them who lived in cities, when the Spaniards arrived in that country, seem all to have worn a particular habit; but this has not been exactly described by the Spanish writers. The robes of the emperor, and of his principal chiefs, are represented as having been very superb; but it is probable, that fancy added to this magnificence. They were considerable proficients in painting and architecture. In painting, they sometimes made use of pencils, at other times they used coloured feathers, disposing them into a kind of mosaic work, and displaying in this work an ingenuity and patience which have never been surpassed by European artists. They cut and polished marble, jewels, and precious stones; they constructed different kinds of armour; they wrought mines of gold, silver, and copper; they had images of gold, silver, wood, and stones; they cut stones of prodigious size, and removed them to great distances from the quarry, to be employed in their buildings; and all this without having the knowledge of any metal harder than copper. Their public edifices are described as having been of stone; and well built. The royal palace opened by thirty gates into as many streets, and the principal front was of jasper of different colours, and highly polished. The passage to the royal apartment was through three courts, of the same materials, and equally well finished as the principal front. The floors of those apartments were covered with mats, and they were hung with cotton cloth, or hangings made of feathers disposed into a variety of lively figures.

Cotton manufactures were very common among them; and on the cloth, after it was woven, they painted various figures. Instead of needles, they used bones; and the sinews of different animals were used for thread. These manufactures were conducted chiefly by the women. They knew something both of poetry and music; and songs set to music, describing the achievements of their ancestors, formed a principal part of their amusements. Their writing was advanced no farther than hieroglyphic representations. It was in this way that the Spanish invasion was announced Montezuma. They were skilled in agriculture, and raised considerable quantities of maize. They had some knowledge of gardening and botany, particularly with regard to medicinal plants, of which this country produces great quantities. The Mexican year consisted of 365 days. It was divided into 18 months, of 20 days each: and the five days which, according to this way of reckoning, belonged to no month, were yearly spent in the greatest festivity. This calendar shows, that they paid more attention to the course of the sun, than to that of the moon.

The principal food of the common people was maize ground into flour and formed into cakes. They made use of plantains, cassave, and many kinds of roots; and the flesh of the pecari, deer, and different kinds of venison. Their chiefs were represented as being very luxurious: the table of Montezuma was every day covered with 200 dishes. They had

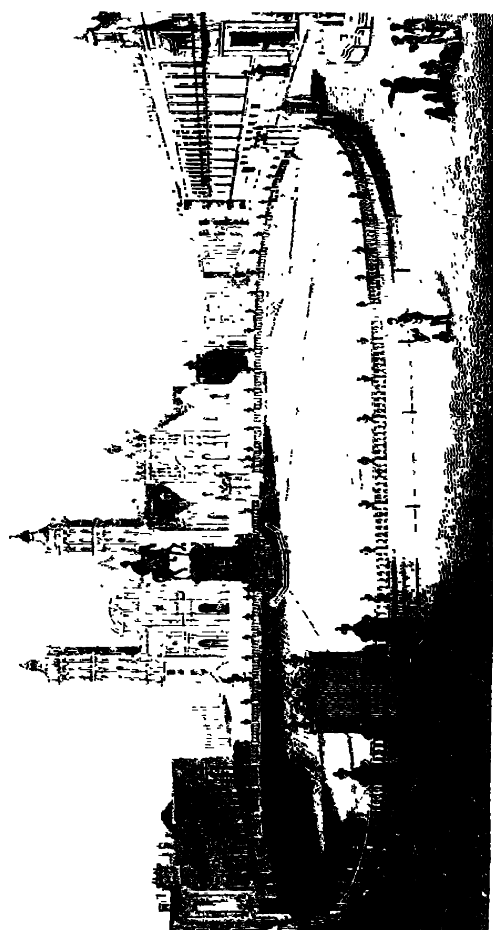
several kinds of intoxicating liquors; and they frequently used them to excess. When any considerable business was to be undertaken, they always commenced their consultations with a feast. They had feasts at weddings, and, in short, at every solemnity and every important transaction; but the women were not permitted to eat in presence of the men. Their principal exercises were hunting and fishing, at which they were very expert. They were fond of dancing to the music of a reed, with several stops, accompanied by a kind of wooden drum. Their dances were performed sometimes in a circle; at other times, an individual exhibited his performances, and then they consisted chiefly of displays of activity and strength. The women likewise danced and sung, but always apart from the men.

Marriages, Education, and Funerals.] The Mexicans, according to Acosta, were married in their temples by a priest. The ceremony consisted in his demanding of the parties, whether they were willing to accept of each other for husband and wife? upon their answering in the affirmative, he tied a corner of the woman's veil to a corner of the man's mantle. In this manner he led them home to the bridegroom's house, where the bride went seven times round a fire which for that purpose had been kindled on the floor; the parties then sat down together by the fireside, and the marriage was looked upon as concluded. If the husband was satisfied with his spouse, he gave an entertainment to her friends, made them presents, and sacrified to the gods; but if he suspected her virginity, she was returned to her family, which was to them a matter of considerable reproach.

It does not appear to be certain, whether polygamy was commonly practised or not. The chiefs, we know, had many wives; but their customs were often different from those of the nation at large. Divorce was allowed by the Mexican law when the parties could not agree; in this case, the husband returned with his wife all the presents which she had received from her friends. Those who had been divorced, were forbidden to come together again, under pain of death; adultery was also especially punished.

The Mexicans displayed exemplary care and diligence in the education of their youth. Public schools were erected in the neighbourhood of their temples, with proper teachers, who were considered as officers of state, and who having carefully studied the dispositions and parts of the boys committed to their charge, fitted them for the army, the church, or the state, according as their parts and dispositions directed. There were also seminaries for the education of females, under the direction of respectable matrons, who instructed their pupils in the principles of religion and morality, together with the less dignified domestic accomplishments. Both sexes were initiated in the poetry of their country, in which were recorded the transactions of former times; and he who treasured up in his memory the greatest number of these, acquired the greatest knowledge of that most useful of all parts of learning, the history of man.

Their funeral rites had a striking resemblance to those of their less polished neighbours, the North Americans. When a person died, the body was washed, and then dressed in its best attire, and set upright; after which it was formally taken leave of by all the friends and relations. The priests in the neighbourhood attended the body to the place of interment; singing mournful songs, and playing melancholy airs. The Mexicans were interred in their ordinary habits, and with them were buried



their arms, and sometimes gold, silver, necessaries of various kinds, or those things which they had esteemed during life. It is even said, that, along with their great men, several slaves were put to death and interred, in order to attend their masters in a future state; but this seems not to be sufficiently authenticated. Instead of burying their dead, they are said sometimes to have burnt them; this seems to have been the case with regard to their chiefs and princes.

Government.] The government of Mexico, when the Spaniards arrived, was monarchical; but it is said to have previously been a republic. At first the kings were elected by the whole community; afterward, the elective power was assumed, exclusively, by the kings of Tacuba, and Tezcuco, and four princes of the blood. The monarch was always chosen from the royal family. Before the king, who had been elected, could be crowned, he was obliged to go on an expedition against some neighbouring nation. At his return he was met by his nobles, the ministers of state, and chief priests, and conducted to the temple of the god of war. Here he was invested with the imperial robes: a golden sword was placed in his right hand, and in his left a bow and arrows. The king of Tezcuco, first elector of the empire, set the crown upon his head; and one of the principal ministers, in the name of the people, congratulated him upon his accession to the crown, and instructed him in the duties which his new dignity enforced upon him. The high priest then anointed him with holy oil, bestowed on him his benediction, and, sprinkling him four times with consecrated water, put on his shoulders a mantle painted with human skulls and bones, to remind him, it is said, that his power did not exempt him from mortality. The emperor then offered incense to the god of war, and swore to maintain inviolate the religion and customs of the realm. The king lived in very great splendour and magnificence. He ate alone, but was waited on by his principal nobility, among whom he distributed the dishes, after he had taken of them what he wanted. He always kept three or four thousand women, of whom two were generally distinguished by certain honours, and were, therefore, by the Spaniards, called his wives. A numerous body of guards filled every court of the palace, and every avenue to the royal apartments; he had likewise a select body of two hundred noblemen, who acted as a kind of body-guards, and added to the splendour of the court. He seldom appeared in public; and when his subjects petitioned him for any favour, they were forbidden to look in his face.

Justice was administered by proper courts, and judges appointed in every city and province; but from them, an appeal could be made to the supreme tribunal, in Mexico, which consisted of 12 judges. Superior, however, to every court of judicature in the kingdom, was the council of state, which was composed of the 6 electors of the empire, and generally held in the emperor's presence: without consulting this council, he seldom resolved on any measure of importance. In these courts the judges were generally regulated by the determination of courts formerly passed, unless when influenced by the interposition of royal authority

The revenues of the crown were under the cognizance of a council appointed solely for that purpose; this council took charge of these parts of the king's income, arising from the mines, as well as of those taxes in kind, which were paid by his subjects of every profession, and which, in the reign of Montezuma, amounted to a third part of every man's profits. The nobles were not subject to the same taxes, but were obliged to main-

tain a certain number of men, to serve in the king's army whenever they were required.

War.] The military affairs of the empire were regulated by a separate council. The profession of a soldier was esteemed the most honourable in the empire, and soldiers every where enjoyed peculiar privileges. Their armies were raised with ease, every cacique, or chief, being obliged, when called upon, to bring a certain number of men into the field. The Spanish writers relate, that Montezuma had 30 vassals, each of whom could bring 100,000 men into the field; but this calculation has evident marks of exaggeration. Each cacique commanded his own vassals, but under the control of the emperor, who generally conducted his armies in person.

War seems to have been the delight of the nation, and military talents were the surest means of preferment. In order to excite emulation in courage and warlike skill among the troops, several orders were created, similar to those of the knights of Europe in the days of chivalry. There were many of these orders, and one in particular, into which none could be admitted, who were not princes, or of royal descent. Their badge was a red ribbon, with which the hair was tied behind; to this were affixed a number of tassels, corresponding to the number of heroic actions performed by the wearer,—a new tassel being added for each exploit. Their arms were bows and arrows pointed with bones; they had also darts, wooden swords edged with flints, clubs, and slings. The body of the army had no defensive armour, but fought naked. Their chiefs had coats of mail made of cotton cloth quilted, and a kind of breastplate made of tortoise shell. The bodies of the combatants were painted with different colours, to terrify their enemies; and they engaged with loud shouts. They were totally ignorant of the art of disposing their forces in battle array and were, consequently, like a rabble of children before men skilled in military discipline. Their fortifications were simple, and corresponded, as they every where do, to the means of attack which could be brought against them. They consisted of trunks of trees fixed in the ground, like palisadoes, with openings for the discharge of arrows against assailants.

Religion.] The principle of fear appears to have been the basis of the Mexican worship; and in common with the religion of other pagan nations, that of the ancient Mexicans consisted chiefly in rites of deprecation. Whilst figures of destructive animals decorated their temples,—fasts, penances, voluntary wounds and tortures, formed the essence of their religious rites. Human sacrifices were deemed the most acceptable, and every captive taken in war was cruelly tortured and sacrificed. The head and heart were the portion of the gods; while the body was resigned to the captor, who, with his friends, feasted upon it. So strikingly predominant was the principle of fear in the Mexican superstition, that one of their most gigantic idols was denominated Terror. To a hideous representative of this god, seated on huge snakes, it was usual to present the heart torn from the breast of the human victim, and to insert it, whilst yet warm and reeking, in the jaws of the blood-thirsty divinity. The notion of a benevolent deity never seems to have been imbibed in Mexico; the object of their adoration seems to have been a complete personification of the evil principle, whom all their efforts were stretched to appease. In the Mexican language, *teotl* was a general term for any divinity; and they had an obscure belief of a creator, whom they styled *Ipalnemoani*, that is, 'he by whom we live;' but their supreme deity was rather the evil spirit, denominated *Klacatecolotoll*, or 'the rational owl,' whose delight was to injur-

and terrify. They believed in the immortality of the soul, and a kind of transmigration,—the good being transformed into birds, and the bad into creeping animals.

The principal deities were 13 in number, among whom were the sun and moon. *Tlaloc*, the god of water, was the master of paradise; but *Mexitli*, or *Heutzilopochtli*, received their chief adoration. This god was painted with the wings of a humming-bird under his left foot. Mr Bullock obtained leave to disinter, and take casts from, an image of the goddess *Teoyamiqui*. The idol is thus described:—"This colossal and horrible monster is hewn out of one solid block of basalt, nine feet high. Its outlines give an idea of a deformed human figure, uniting all that is horrible in the tiger and the rattle-snake: instead of arms, it is supplied with two large serpents, and its drapery is composed of wreathed snakes, interwoven in the most disgusting manner, and the sides terminating in the wings of a vulture. Its feet are those of the tiger, with claws extended in the act of seizing its prey, and between them lies the head of another rattle-snake, which seems descending from the body of the idol. Its decorations accord with its horrid form, having a large necklace composed of human hearts, hands, and skulls, and fastened together by the entrails,—the deformed breasts of the idol only remaining uncovered. It has evidently been painted in natural colours, which must have added greatly to the terrible effect it was intended to inspire in its votaries." There were a number of other inferior divinities; and the different idols, rudely formed of clay, wood, or stone, sometimes decorated with gems and gold, were numerous. One was composed of certain materials pasted together with human blood. Perhaps the entire system of Mexican superstition was the most execrable that ever appeared on the face of the earth, alike blasphemous to God, and destructive to the welfare and social happiness of man.

The first *teocalli*, or great temple of Mexico, was composed of wood. The second temple was erected in 1486, and appears to have been of a pyramidal form, 121 feet high, 316 feet at the base, and situated in the midst of a vast enclosure, surrounded with walls. It seems to have been a solid mass of earth faced with stone, and to have consisted of five stories. On the summit of this enormous cube, were a great number of altars, covered with wooden cupolas; the point where these cupolas terminated, was elevated 177 feet above the base of the edifice.

Present Population.] The modern population of Mexico may be divided into five classes, namely: 1*st*. Spaniards born in Old Spain; 2*d*. The descendants of Europeans, without any mixture of African or Indian blood; 3*d*. The different races of Mulattoes and Mestizoes, or the issue of the crossings of the European, Indian, and African blood; 4*th*. The Indigenes, or American natives; 5*th*. The imported African slaves. The mixed breeds, or 3*d* class, may be subdivided into three classes, namely: 1*st*. Mestizoes, descended of whites and Indians; 2*d*. Mulattoes, the offspring of whites and negroes; 3*d*. Zambos, the issue of negroes and Indians. The first two classes constitute the whites; the third class, with its three subdivisions, comprise the people of colour; the copper-coloured race are composed in the fourth class; and the blacks in the fifth class.

If it be a matter of no small difficulty to ascertain with accuracy the actual population of those states where politico-economical science has made the greatest progress, the difficulty is mightily increased in Mexico, where the germ of political science has hardly begun to develope itself.

We need not be surprised, therefore, that no enumeration of the inhabitants is contained in the Mexican registers previous to 1794; and that the most erroneous ideas were entertained on this subject, even by those who were apparently best qualified to determine the problem. In 1793, an enumeration of the whole population (exclusive of Guatemala) was undertaken by the viceroy, count de Revellagigedo; but he was unable to complete his undertaking, from the powerful obstacles to be overcome in a country where those employed are but little skilled in such statistical researches. Hence the enumeration was not completed in the intendancies of Guadalajara and Vera Cruz, and the province of Cohahuila.

The following table presents a statement of the population of New Spain, from the notices transmitted by the intendants and governors of provinces to the viceroy, previous to May, 1794:

Intendancies.	*Population.*	*Capitals.*[1]	*Population.*
Mexico,	1,162,886	Mexico,	112,926
Puebla,	566,443	Puebla,	52,717
Tlascala,	59,177	Tlascala,	3,357
Oaxaca,	411,366	Oaxaca,	19,069
Valladolid,	289,314	Valladolid,	17,093
Guanaxuato,	397,924	Guanaxuato,	32,098
San Louis Potosi,	242,280	San Louis Potosi,	8,571
Zacatecas,	118,027	Zacatecas,	25,495
Durango,	122,866	Durango,	11,027
Sonora,	93,396		
Nuevo Mexico,	30,953		
Two Californias,	12,006		
Yucatan,	358,261	Merida,	28,392
Total population of the above intendancies,	3,865,529		

Estimate of the population of the intendancies of Guadalajara and Vera Cruz, with the province of Cohahuila, as reported to the king by the count de Revillagigedo:—

Guadalajara,	485,000	
Vera Cruz,	120,000	
Cohahuila,	13,000	
Approximate result of the enumeration in 1793,	618,000	4,483,529

The above table exhibits the minimum of the population; for from fear of an increase of taxes, every head of a family endeavoured to diminish the number of families in his house; and others withdrew themselves from their several districts till the enumeration was finished. From these and other circumstances, it was judged that at least a sixth or seventh part ought at least to be added to the sum total; and the population of all New Spain was therefore estimated by the government at 5,200,000. The census has never since been renewed; but Humboldt supposes that the population must have increased to at least 5,900,000, in 1803; which, even in his opinion, was probably far below the truth; and to 6,500,000, in 1808.[1]

[1] The reasons of this rapid increase, he draws from the augmentation of the tithes, which have doubled in less than 24 years preceding 1803,—the increase of the Indian capitation,—the duties on consumption,—the progress of agriculture and civilization,—the number of newly constructed houses in every part of the table-land,—and finally, from the excess of the births above the deaths. By means of documents furnished him by the archbishop of Mexico and others of the Spanish clergy, he was enabled to fix with considerable accuracy the proportion betwixt them, which varies very differently, according to the climate and salubrity of the air. The following table shows the proportion between the births and deaths, in 11 towns and villages of New Spain, namely:

The following table exhibits Humboldt's estimate of the population in 1803, with the number of inhabitants to every square mile:

I. VICEROYALTY OF MEXICO PROPER, 329,723 SQUARE MILES; 5,488,100 INHABITANTS, OR 17½ TO THE SQUARE MILE.

Intendancies.	Square Miles.	Total Inhabitants.	Inhabitants to Square Mile.
1. Mexico,	45,440	1,511,000	31⅓
2. La Puebla,	20,666.2	813 000	39½
3. Vera Cruz,	31,747.1	156,000	5
4. Oaxaca,	34,093.1	534,800	15 1-10
5. Merida,	45,823.1	465 800	10⅓
6. Valladolid,	25,486	476.400	18⅔
7. Guadalajara,	74,260.2	630,500	8⅓
8. Zacatecas.	18,054.2	153,300	8⅓
9. Guanaxuato,	6,984	517,300	74
10. San Louis Potosi,	18,266.1	230,000	12 5-6
	320,723	5,488,100	

II. INTERNAL PROVINCES, 588,656 SQUARE MILES; 450,800 INHABITANTS, OR 1⅓ TO THE SQUARE MILE.

Western Internal Provinces.

Provinces.	Square Miles.	Total Inhabitants.
1. Sonora,	146,764	121,400
2. Durango,	129,426	159,700
3. New Mexico,	43,769	40,200
4. Californias,	72,498	21,600
	392,452	315,900

2. *Eastern Internal Provinces.*

Provinces.	Square Miles.	Inhabitants.
1. Cohahuila,	52,392	16,900
2. Texas,	83,902	21,000
3. Santander,	39,816	38,000
4. New Leon,	20,094	29,000
	196,204	104,900

According to Pike's estimate, the population of the internal provinces, independent of the Californias, was 635,000 souls, exceeding Humboldt's

	Deaths.		Births.
Dolores,	100	-	253
Singuelucan,	100	-	234
Calimaya,	100	-	202
Guanaxuato,	100	-	201
St Anna,	100	-	195
Marsil,	100	-	194
Queretaro,	100	-	188
Axapusco,	100	-	157
Iguala,	100	-	140
Malacatepec,	100	-	134
Panuco,	100	-	123

The mean term of these eleven places is 100 to 183; but the proportion which may be regarded as suitable for the whole population, in Humboldt's opinion, is 100 deaths to 170 births. The excess of births is much greater on the table-land than towards the coast, or in the very hot regions; as, for instance, between Calimaya, situated in a very elevated and dry plain, and Iguala, placed in a very low, warm, and humid valley; the former having 202 annual births to 100 deaths, and the latter 140 births to 100 deaths. The difference is greatest at Panuco, on the coast, where, for an average of ten years, the births to the deaths were as 123 to 100. In the hot and moist regions, the mortality is so great, that the population experiences no sensible increase; but in the table-land, where the population is chiefly concentrated, the proportion of births to deaths averages 190 or 200 to 100. The whole population itself, not being accurately determined, it is impossible to state precisely the proportion of the births and deaths to all the inhabitants. We are favoured by Humboldt with that relative proportion, in the city of Guanaxuato, and in the city and territory of Queretaro, only. In the former, containing a population of 60,100, the births are 1 in 15, and the deaths 1 in 29; in the latter, where the population is 70,600, the births are 1 in 14, and the deaths 1 in 26. In general, the proportion of the births to the population may be estimated at 1 in 17, and the deaths 1 in 30; and the annual number of deaths in New Spain at 200,000, and that

estimate by 184,200 souls; and as he was upon the spot, his estimate is perhaps more correct. Navarro estimated the total population of the Mexican republic, in 1825, at 6,122,354 souls. This population was composed of 1,097,029 Spaniards (Creoles), 3,676,231 Indians, and 1,338,706 of divers castes. This statement is far below Balbi's, which gives to Mexico, exclusive of Guatemala, 7,500,000 souls. But it must be remembered, that, in the long-continued struggle of 15 years, the population must have suffered severely, and that a very great diminution must have taken place in the number. In the absence of all other documents, if the carnage occasioned by the civil war be taken into account, we have little or no scruple in admitting the truth of Navarro's statement, and that the population, in 1825, was really less than in 1808, when it was estimated at 6,500,000 souls by Humboldt. As to the proportion of the different races, in 1803, to each other, the following table is given by Humboldt, namely:

Indigenous, or Indians,	2,500,000
Whites, { Creoles, 1,125,000 / Europeans, 75,000 }	1,200,000
African negroes,	6,100
Casts of mixed blood,	2,232,000
Total,	5,938,100

The civilized Indians in the province of New Mexico compose 24 tribes. In the provinces of Sonora and Cinaloa, the whole number of civilized and tributary Indians does not amount to 2,100 souls. But besides the native tribes enumerated in the Mexican population, and pursuing agricultural and mechanical employments, there are numbers of savage and independent tribes scattered throughout the northern, eastern, and northwestern parts of the internal provinces,—some keeping the Spaniards in a state of constant alarm,—and others living on a friendly footing with them, though always at war with each other. In the space between the Rio del Norte and the American frontier, are the following tribes: 1. The *Tawakenoes*, on the *Rio Brassos*, 200 warriors, 800 souls, 2. *Tancards*, on the same stream, 600 warriors, 2,400 souls; 3. *Kanses*, on the bay of St Bernard, numbers unknown; 4. *Carankowas*, on an island, or rather peninsula, in the bay of St Bernard, 500 warriors, 2,000 souls; 5. *Mayes*, at the mouth of the Guadaloupe river, 200 warriors, 800 souls; 6. *Accocesaws*, 200 miles S.W. of Nacogdoches, 80 warriors, 320 souls; 7. *Bedics*, 60 miles west of Nacogdoches, 100 warriors, 400 souls; 8. *Keyes*, or *Keychies*, on Trinity river, 60 warriors, 240 souls; 9. *Aliche*, only 25 souls remaining, the rest being cut off by the small pox. Total, 9 tribes, 1,340 warriors, 5,360 souls.—In the province of Cohahuila, are the *Lee Panis* Indians, divided into three roving bands, of 350, 300, and 100 warriors: total, 750 warriors, 3,000 souls. In the provinces of New Mexico and New Biscay, besides the *Jetans*, *Camanches*, and *Kyahways*, enumerated in the list of Indian tribes belonging to Louisiana, and always hovering on the frontiers of Spanish America and the United States, are the *Appaches*,

of the births at 350,000; annual excess of births above deaths, 150,000. From these considerations, and allowing only a tenth in place of a sixth part of the inhabitants to have been omitted in the census of 1793, Humboldt is persuaded, that in admitting 5,900,000 as the population in 1803, he has given a number much below the existing population. If to this number be added the aggregate increase of five years, or 750,000 persons, the population in 1808 would be upwards of 6,500,000 persons.

Utahs, and *Nanahaws*, whose numbers are estimated at 8,000, and whose habits will be afterwards described.

In the province of Sonora, the tribes of *Indios Bravos*, or wandering Indians, as they are termed by the Spaniards, are very numerous; as, the *Pimas*, inhabiting the Pimeria Alta; the *Cocomaricopas;* the *Seris*, towards the source of the river of Ascension, a very warlike tribe, and believed by the Mexican literati to be of Asiatic origin, on account of the analogy between their name and that of the Seres, placed by ancient geographers at the foot of the mountains of Ottorocorras, to the east of Scythia, extra Imaum; the *Popagos*, to the north of the Seres; the *Cucucaches* and *Cucapas*, at the mouth of the Rio Gila; the *Jumas*, immediately above the confluence of the Gila and Colorado; the *Jenegueih* Indians, at the head of the gulf of California. Between the Colorado and Gila are the *Tejuas*, whence the country north of California obtained the name of Grand Tejuaya, as also of Apacheria, from the Appaches: the *Yabipeas*, with long beards; the *Aijoras*, at the source of the Gila; the *Yamayas*, *Jatchedums*, *Cosninas*, *Mocquis*, *Jutas*, and *Tabegnachis*, near the most N.E. sources of the Colorado; the *Ragnapuis*, between the upper courses of the Colorado and Buenaventura rivers; and beyond these the *Yamparicas*. To the N.W. of the Colorado are the *Chimeguahas*, *Nochis*, *Jambuicrariris*, *Timpabachis*, and the *Guacaros*.

The Indians between the Gila and Colorado are not so barbarous and savage as those in their vicinity, but have advanced considerably in civilization. A missionary who visited the Mocquis, in 1773, was astonished to find an Indian town on the Yaguesila, with two great squares, houses of several stories, streets well laid out, and parallel to each other. Every evening the people assemble on the terraces of their houses, which seem to resemble those of the *Casas Grandes*, mentioned before as an ancient abode of the Aztecs or Mexicans. This region everywhere presents traces of the cultivation of the ancient Mexicans. Perhaps at the period of the successive migrations of the Toltecs, Chichimecs, and Aztecs, some tribes separated from the rest, and remained in these northern regions. However, the languages spoken by these Indians is essentially different from that of the Mexicans.

State of Society, Manners, and Customs.] The whites, under the two denominations of Spaniards and Creoles, occupy the first place in the scale of Mexican society, in respect of political importance, wealth, and information, though in numbers they do not amount to above one-half of the mixed breed or third class of Spanish-American population. Of these two classes of whites, the Spaniards, previous to the revolution, engrossed the whole political power, to the exclusion of the Creoles; and this political inequality, of course, produced a deep-rooted enmity on the part of the Creoles, and an overbearing haughtiness on the part of their oppressors. As long, indeed, as the Creoles considered that their security against the other classes of the population, as the Indians and the mixed breeds, depended on making common cause with the Europeans, the court of Madrid was safe enough in its system of exclusion and oppression; and to this principle, Humboldt ascribes very satisfactorily the passiveness and long forbearance of the Creoles. But after the peace of 1783, which gave independence to the Anglo-Americans, the common language of a Creole (says Humboldt) became: "I am not a Spaniard, I am an American,"—a declaration sufficiently ominous, and an indication of the growing self-importance of the Creoles. By a succession of legislative measures, commenced

in 1827, the entire expatriation of the Spanish residents has been effected by the class over whom they so long unjustly tyrannised. The Creoles are naturally acute, and have a happy aptitude for all arts and sciences, though education is much neglected amongst them. It is in Mexico, chiefly, that we meet with well-informed Creoles; but there is a remarkable contrast between the people in the interior provinces and the enlightened classes of the capital.

As the whites form the only class who possess any political importance and intellectual cultivation, they are also the only class who possess great wealth. Wealth is unhappily more unequally distributed in Mexico than in all the other Spanish colonies put together, being concentrated in the hands of a few opulent families, and successful mining-speculators.

The creoles are thus characterised by an American traveller: "Satisfied with the enjoyment of their large estates, and with the consideration which their rank and wealth confer, they seek no other distinction; they are not remarkable for their attainments, or for the strictness of their morals. The lawyers," it is added, "who, in fact, exercise much more influence over the people, rank next to the nobles. They are the younger branches of noble houses, or the sons of Europeans, and are distinguished by shrewdness and intelligence. Next in importance are the merchants and shopkeepers; for the former are not sufficiently numerous to form a separate class: they are wealthy, and might possess influence, but have hitherto taken little part in the politics of the country, most probably from the fear of losing their property. The labouring class in the cities and towns, includes all castes and colours; they are industrious and orderly, and view with interest what is passing around them; most of them can read, and in the large cities, papers and pamphlets are hawked about the street, and sold at a cheap rate. The labouring class in the country is composed, in the same manner, of different castes; they are sober, industrious, docile, ignorant, and superstitious, and may be led by their priests and masters to good or evil. Their apathy has in some measure been overcome by the long struggle for independence, in which most of them bore a part, but they are still under the influence and direction of the priests. The last class, unknown as such in a well regulated society, consists of beggars and idlers, drones that prey upon the community, and who, having nothing to lose, are always ready to swell the cry of popular ferment, or to lend their aid in imperial tyranny. The influence of this class, wherever it is numerous, upon the fate of revolutions, has always been destructive to liberty."

The manners and customs of the Mexican Spaniards, or Creoles, are different in many respects from those of the parent state; and have become much corrupted in the populous, opulent, and delicious city of Mexico. They are extremely addicted to festivals, fire-works, gambling, horse-racing cockfighting, music, dancing, and smoking cigars. All the Mexican ladies smoke tobacco in little cigars. Continually occupied in this amusement, as soon as one cigar is exhausted another is lighted; and they only cease to smoke when they eat or sleep. It may be easily conceived how much the health and complexion of a fine female are vitiated by this indecent and abominable practice. The most of the day is consumed in eating. In the morning they take chocolate; breakfast is served at nine; another breakfast at eleven; and soon after noon, they dine. The *siesto*, or afternoon nap, is succeeded by an afternoon launcheon, more chocolate, and a hearty supper. The Mexican ladies imitate the European fashions, and are osten-

tations of their wealth, in the quantity of their diamonds, and the size of their pearls, when at balls and festivals.

The dress of the males has undergone a similar change, and there is little difference in this respect between them and those of Old Spain. Those of the lower class, of whatever cast or colour, were all, a few years since, wrapt up in mantles, without any other dress but drawers and a little hat. There are a great number of baths at Mexico, the frequent use of which atones for the want of linen; and the climate being warm and dry renders bathing agreeable and salutary.

The other casts, as the Meztizoes, Mulatoes, Indians, and Blacks, are possessed of neither power nor property, nor education; all these, with a few exceptions, being monopolized by the whites. The Meztizoes are of a milder character than the Mulatoes. Meztizoes and Zamboes, or the fruit of European and Indian crossings, are unknown in the United States, where the whites have never mingled with the natives or copper-coloured race, nor these latter with the blacks. As few or no women accompanied the Spanish conquerors of Mexico, they were necessitated to matrimonial intercourse with the native females, and thus a race of descendants of a most anomalous description was produced. These, in a few generations, mixing with imported Africans, and with the whites, still farther increased the mixed breeds and different classes, who in process of time assumed a variety of ranks, exactly according to their greater or less affinity to the whites. The scale of society is determined exactly and rigorously according to the colour. These distinctions arising from colour operate as so many barriers to that social consolidation which is the strength of a nation, and so essential to its independence and felicity. The white classes sincerely hate each other, and both are as sincerely hated by the mixed breeds; and this mutual hatred of all the different grades of colour to one another was carefully fomented by the Sparish court, in order to preserve its own power in the country. The whole number of blacks does not much exceed 6000, and they were all fully emancipated by decree of the president of 15th September 1829.

As to the moral or intellectual faculties of the present race of Mexican Indians, it is difficult to appreciate them justly, if the long state of degradation under which they have laboured be considered. The better part of this indigenous race, from whom a greater degree of intellectual cultivation might have been expected, almost wholly perished in their disastrous struggle with European ferocity. Their temples were levelled with the ground, their priests, in whose hands were deposited all their historical, mythological, and astronomical science (for the priests observed the meridian-shades in the gnomon, and regulated the kalendar), were exterminated; and those hieroglyphical paintings, the only medium by which every kind of knowledge was transmitted from generation to generation, were all burned by the monks. The Indians thus deprived of these means of instruction enjoyed by their ancestors, were plunged in ignorance so much the deeper, as the Popish missionaries were totally ignorant of the Mexican language, and could therefore substitute no new ideas in place of the old. The present Mexican Indians are a grave, melancholic, and silent race, except when inebriated by intoxicating liquors. They have neither that mobility of sensation, gesture, or feature, nor that mental activity which distinguishes the tribes of equinoctial Africa. A Mexican Indian and a Congoese Negro are a perfect contrast. Indian gravity is particularly remarkable in the children, who, at four or five years old, display

much more intelligence and maturity than white children. A mysterious air is thrown by a Mexican over his most indifferent actions, and the most violent passions are never painted in his face. The Indians of Tlascala display more energy than those of Mexico; and even in their present degradation, the descendants of these republicans are still distinguished by a certain haughtiness of character, inspired by the memory of their former grandeur. The introduction of such Christianity as they received from the Spanish ecclesiastics, has produced no other change on the Indians than the mere substitution of new ceremonies for those of a religion essentially sanguinary. Dogma has not succeeded to dogma, and the natives know nothing of religion but its exterior forms. They are amused but not edified by the splendid processions, the pompous rites, and the numerous festivals of the Catholic worship; Indians masked, and adorned with small tinkling bells, perform savage dances round the altar, while a monk elevates the host. Inured to a long slavery, the Mexicans patiently bear the yoke of oppression, and only oppose to the domination of the whites a cunning, artfully veiled under the appearance of stupidity and apathy. Unable to revenge himself on his oppressors, he delights to make common cause with them in oppressing his fellow-Indians. Harassed for ages by tyranny, he wishes to tyrannize in his turn, and none exercise power with greater severity than the copper-coloured magistrates of the Indian villages, especially as they are sure of being supported by the priest, or sub-delagado The Indians seem to possess little or no imagination; but when an Indian attains a certain stage of civilization, he displays a great facility of apprehension, a judicious mind, a natural logic, and a particular talent for metaphysical refinement. He reasons coolly and orderly, but never manifests that versatility of imagination, that sentimental glow, and that creative and animating art, which characterize the people of southern Europe. Their dancing and music partake of their natural gravity and melancholy. Their songs are terrific and mournful. Their women are possessed of more vivacity, but share that usual degree of servitude to which females are subjected among nations where civilization is in a state of infancy.

The Mexican Indians are divided into two classes, namely: the nobles or *caziques*, and the tributary Indians. The former, by the Spanish laws, ought to be on a level with the Castilian nobility, in point of privileges. But in their present situation this advantage is wholly illusory. The cazique is now a very different being from what he was in the days of Montezuma; and is hardly distinguishable in his dress, mode of living, and that aspect of misery which he loves to exhibit, from his humble vassal who still shows him the same distant respect which was prescribed by the ancient institutions of the Aztec hierarchy. As the oppressed love to be oppressors in their turn, the tributary Indians are more oppressed by their own caziques than by the Spaniards themselves. There still exist at Panuco two Indian communities, amounting to about 909 souls, who speak the ancient Guaztec language, and may be regarded as the sole survivors of a tribe which once numbered 100,000 souls. Very few Indians enjoy any thing like a mediocrity of fortune. In Oaxaca, Valladolid, the valley of Tolucca, and in the vicinity of La Puebla, there are several Indians who possess great wealth under an appearance of extreme poverty. "A more, mild, polite, civil race of men than the native Indians," says a recent writer, "I have not found in any country. They are at zero in ignorance, but their old and many of their present masters, are many de-

great below in ignorance, from the defect of a bad education. I have more hopes of the Indian population (who are five-sixths of the whole) than from either the descendants of the Europeans, or the mixed breed.

Languages.] Of the various languages spoken throughout New Spain, the Mexican is the chief. The grammars and dictionaries which have been published of this language show it to differ essentially from the Peruvian. The words frequently end in *tl*, and are besides of a surprising and unpronounceable length, resembling in this respect the languages of the North American savages, and some of the African dialects; but strongly contrasted with those of Asia, in which the most polished, as the Chinese, are monosyllabic. According to Clavigero, the Mexican tongue wants the consonants *b, d, f, g, r,* and *s,*—in this respect strictly coinciding with the Peruvian language, except that the latter, instead of the *s,* is said to want the *z.* Some of the Mexican words are sixteen syllables in length, and are from this circumstance harsh and unpleasant to the ear.

The Spanish colonists being chiefly of Andalusian descent, the Spanish language is spoken with an accent disagreeable to a Castilian ear, and is much corrupted in New Spain; an infinity of foreign expressions having been adopted, and a new meaning given to many words and phrases.

Literature.] The genius of the Catholic religion, the establishment of the inquisition, and the selfish policy of the mother-country, combined with the habits and pursuits of the colonists themselves, have so effectually co-operated to a seclusion of almost all knowledge in this country, that the colonists may be said to have vegetated like the acorn in the forest; they are but beginning to see, through the darkness of the gloom that surrounds them, the light of day. The education of the lower classes has been utterly neglected; and though instructed in some of the ritual observances of Catholicism, yet this instruction seldom goes farther than to teach them to adore the Virgin, and to make the sign of the cross; whilst in the Indian villages ignorance is carefully fostered, and the ancient idolatry frequently winked at by their caziques. The education of the higher classes has been somewhat better attended to; and in the universities there are some professors who may pass for learned. The rudiments of science only were taught in these seminaries; and these were diffused over a very narrow surface, as the possession of learning and science conferred no distinction, and led to no emolument, in a country where the simple fact of not being born in Spain was an effectual exclusion from all promotion. Such injudicious and selfish policy has long operated as a bar to all literary industry and aspiring genius. Some incipient rays of light have, however, lately appeared; and there is some reason to hope that the darkness will be gradually dispelled. The method of study has been reformed in the seminaries of Mexico; and in place of scholastic subtilties, the belles lettres and other useful studies begin to be substituted. Reading is become an article of request among the higher classes of Creoles; and a number of modern scientific institutions have been lately formed at Mexico. "Most of the people in the cities," says a recent traveller, "can read and write. I would not be understood as including the *leperos;* but I have frequently remarked men clothed in the garb of extreme poverty, reading the gazettes in the street. Of these there are three published every other day in the week, which are sold for 12½ *cents* a-piece; and pamphlets and loose sheets are hawked about and sold at a reasonable rate. There are several booksellers' shops, which are but scantily supplied with books. The booksellers have hitherto laboured under all the disadvantages

of the prohibitory system of the Roman catholic church, but are now endeavouring to furnish themselves with the best modern works. The few books to be found in the shops are extravagantly dear. There are several valuable private libraries; and many Creole gentlemen, who have visited Europe, have a taste both for literature and the fine arts. This is certainly more rare among those who have never been out of their own country. The means of education were more limited under the colonial system, and liberal studies were discouraged. The Latin language, law, theology, and philosophy, were taught in the colleges, and only so much of the latter as the clergy thought might be taught with safety. The children of the nobility and wealthy inhabitants are principally taught at home. The places of public instruction in the greatest repute, are the *Seminario* and *San Ildefonza*. Lancasterian schools were established in the capital by the emperor; and his ex-majesty assured Mr Bullock, that it was his intention to extend them throughout the provinces. "There are now," says this traveller, "three or four daily papers (1823); but they contain very little information; they are only just beginning to insert advertisements, *gratis*, in the same manner as they were in England at the commencement of our newspapers." Medical and chirurgical knowledge is represented to be at the lowest ebb. Dissections are not allowed by law. "An able oculist would be a valuable acquisition and blessing to Mexico, where diseases of the eye are so prevalent: there is not a native who can perform an operation. Several young physicians from the United States had arrived, and were getting into practice, although labouring under the great disadvantage of not knowing the Spanish language." Since the period of this traveller's visit to Mexico, there is reason, however, to believe that some improvement has taken place. One of the first objects to which all the republican governments have turned their attention, has been the means of public instruction.

The university of Mexico was founded in 1551, under the denomination of the royal and pontifical university; the cloister was composed of 251 doctors, who possessed every faculty but that of reasoning. There have been as many as 200 students at one time in this institution, but there were, in 1822, very few. A public library was founded about 50 years since for the use of the university, and is well stocked with books of old scholastic theology; but it would be in vain to expect, in this library, new editions of the classics, or new works in science and philosophy; because (says Estalla) certain incidents have prevented the full enjoyment of the revenues, though equal to any in Spain. There are several other colleges in Mexico, as one founded by the archbishop of Guadalajara; a seminary founded by the archbishop of Mexico, in 1682, according to the exact method ordered by the council of Trent; the college of St John de Lateran; and 5 colleges formerly belonging to the Jesuits.

A deficiency having at length been observed of men capable of directing the mineralogic operations so general in New Spain, a *Mineria*, or college of mines, was instituted some years ago, where youth were instructed not only in that science, but in other important branches of education; but the funds of this excellent institution have been diverted to other purposes. Another recent institution, which has shared the same fate, was the academy of the three arts of architecture, sculpture, and painting. This academy owed its birth to the patriotism of several Mexican individuals, and to the exertions of the minister Galvez. The government assigned to it a noble and spacious building, and the revenues

amounted to £5,208 sterling annually. This establishment produced a surprising effect on the architectural taste, as displayed in the symmetry of the buildings, the perfection of the stone-hewing, and the ornaments of the capitals and stucco relievos, and in the vast number of grand and beautiful stone edifices in the cities of Mexico, Guanaxuato, and Queretaro. This establishment has been recommended to the attention of the new legislature.

Religion and Ecclesiastical Government.] Roman catholicism, in its most rigid form, is the religion established in Mexico. The ecclesiastical government is under the jurisdiction of 1 archbishop and 8 bishops. The Mexican clergy were estimated by Humboldt at 10,000, the half of whom were regulars. If lay brethren and sisters be included, the whole number would be about 14,000. The annual revenue of the Mexican bishops collectively, amounted, previous to the revolution, to 539,000 dollars, or £121,225 sterling: thus—

	Dollars.	Pounds sterlin
Archbishop of Mexico, . .	130,000	29,250
Bishop of La Puebla, . . .	110,000	24,750
— Valladolid, . .	100,000	22,500
— Guadalajara, . .	90,000	20,250
— Durango, . . .	35,000	7,875
— Monterey, . .	30,000	6,750
— Yucatan, . . .	20,000	4,500
— Oaxaca, . . .	18,000	4,050
— Sonora, . . .	6,000	1,350

The inequality of fortune, so conspicuous in New Spain, is still more conspicuous among the clergy,—many of the lower orders of whom, in the archbishopric of Mexico, do not possess incomes exceeding £25 sterling annually. The chapter of the Mexican cathedral contains 26 ecclesiastics. The dean has 10,000 dollars, the canons from 7,000 to 9,000 dollars, and the lesser canons from 2,000 to 4,000 dollars annually.

The inferior clergy of New Spain are divided into *curas, doctrineros,* and *missionaros.* The first are parish-priests in those parts of the country where the Spaniards have settled. The second have the charge of the Indian districts subjected to the Spanish government, and living under its protection. The third are employed in instructing and converting the fiercer tribes, which disdain subjection to the Spaniards, and live in remote or inaccessible regions, where the Spanish arms have not yet penetrated. Of these three orders, the first are the best paid, some curacies being worth many thousand dollars, and one in the archbishopric of Mexico is worth 14,000 dollars, or £3,150 sterling, annually. Many of the curates run a successful career of ambition, and become deans, prebends, and bishops. Of these three orders, the first are what are denominated in the Catholic nomenclature, seculars; and the two last regulars, who are not under the control of any diocesan, and belong to the four mendicant orders of monks. The secular clergy have produced hitherto no men of talents or erudition; and it is to the regulars alone that the Americans, whether Creoles or natives, are indebted for any portion of knowledge which they possess; and it is to them only that we are indebted for any information respecting the climate and productions of Spanish America, and the former and present state of the natives. The first attempts to instruct the natives were made by monks, and the business of Indian conversion is lodged wholly in their hands. Whenever a call for new missionaries is made, men of the most ardent and aspiring minds, impatient of the ennui and restraint of a cloister, eagerly offer their services, and repair to the New World in quest of

liberty and distinction. As to the character and moral conduct of the clergy, various and contradictory statements have been given. A considerable reformation in morals has taken place among them since the exclusion of the regulars from filling parochial cures has been effected; and the bulk of the inferior clergy, who perform the drudgery of the office, are said to be liberal and well-informed men. The following remark of Pike concerning the inferior clergy, is worthy of notice, as it has been confirmed since by recent events:—" I scarcely saw one of them who was not in favour of a revolution. Being generally Creoles by birth, and always kept in subordinate grades, without the least shadow of probability of rising to the superior dignities of the church, their minds have been soured to such a degree, that I am confident in asserting, that they will lead the van, whenever the standard of independence is raised in the country." This prediction has been exactly and recently verified; for a Creole priest, named Hidalgo, a man of abilities, eloquence, and information, was the prime mover of all the disturbances that have since agitated Mexico: and though he lost his life in the attempt, his place was soon supplied by another priest named Morilos.

Romish superstition appears in all its pomp in New Spain. The churches and convents are magnificently built and richly adorned; and on high festivals, the display of gold, silver, and precious stones, is such as to exceed European conceptions. The rail round the high altar of the cathedral of Mexico is of solid silver; and there is a silver lamp, so capacious, that three men get in to clean it; while it is also enriched with lions' heads, and other ornaments in pure gold. The images of the virgin and other saints are either solid silver, or covered with gold and precious stones. The cathedral of Chihuahua is the most superb edifice in New Spain. The whole front is covered with statues of the apostles and the different saints, set in niches of the wall; and the windows, doors, &c. are ornamented with sculpture. The interior decorations are immensely rich. The cost of this building, including the decorations, was 1,500,000 dollars, or £375,000 sterling; and was defrayed by a tax of 12½ per cent. on every ingot of gold or silver taken out of the neighbouring mines. " In this country," says a recent writer, " your eyes are tired and your ears stunned with the luxurious churches, convents, &c. &c., and their fatiguing music. Their gold and silver, collected by such cunning industry, may ere long atone for its nefarious mode of acquisition, by the use it will, perhaps, alone be put to. Those who at present enjoy the benefit, have lost, and are losing daily, their power over the multitude, having long lost all moral influence over the few that rule; which reduction of the power of the priests is much accelerated by the banishing the old Spaniards, who, though so lately possessing all the power and the greatest part of the wealth, made so great an abuse of both as to be so detested by the people, that their banishment is one of the most popular acts of the legislators, without any temptation of property; for neither those who emigrated by their own good-will, nor those that were banished for their intrigue have lost one cent of their perhaps ill-gotten wealth."

CHAP. VI.—MANUFACTURES AND COMMERCE.

MANUFACTURES have made some progress in Mexico, notwithstanding the long narrow and restrictive policy of the Spanish government: their

total value was estimated by Humboldt at 8,000,000 dollars, or *L.*1,800,000 sterling. In the intendancy of Guadalajara, in 1802, cotton and woollen cloths, to the value of 1,601,200 dollars, or *L.*360,240 sterling; tanned hides to the value of 418,900 dollars, or *L.*94,252 10*s.* sterling; and soap to the amount of 268,400 dollars, or *L.*59,390 sterling; total, 2,288,000 dollars, or *L.*513,912 10*s.* sterling, were manufactured. The cotton manufactures of the intendancy of Puebla furnished annually, in time of peace, a produce of 1,500,000 dollars, or *L.*337,500 sterling, for interior commerce. This produce was not derived from large manufactories, but from a great number of looms dispersed throughout the towns of La Puebla, Cholulo, Huexocingo, and Tlascala. At Queretaro, 200,000 lbs. of cotton wool were consumed in the manufacture of *mantas* and *rebozos*, or mantles and mufflers, and 20,000 pieces of mantas, of 32 Spanish ells each, were annually made. The city of Puebla contained, in 1802, 1,200 weavers of all sorts. Here, and in the vicinity of Mexico, the printing of calicoes has made great progress within these few years.

The oldest woollen manufactories of Mexico were those of Tezcuco, which were chiefly established, in 1592, by Velasco, but have since passed almost entirely into the hands of the Indians and Mestizoes of Queretaro and Puebla. The woollen and cloth stuffs manufactured at the former place produce 600,000 dollars of annual value, or *L.*135,000 sterling; and consume 63,900 arrobas, or 1,613,500 lbs. of Mexican sheep wool.

With the exception of a few stuffs of cotton mixed with silk, the manufacture of silks is at present nearly annihilated in Mexico. There are considerable manufactures of hard soap at Puebla, Mexico, and Guadalajara; and nearly 200,000 arrobas, or 5,050,000 lbs. of this article, are annually made in the first of these cities. The abundance of soda on the high table land is highly favourable to this manufacture. Formerly there were fine manufactories of delft ware at Puebla, but they have declined much from the low price of the stoneware and porcelain of Europe, imported at Vera Cruz.

The manufacture of gunpowder is very extensive, the annual demand being more than 1,400,000 lbs. There are few countries in which a more considerable number of large pieces of wrought plate, vases, and church-ornaments, are annually executed than at Mexico. The smallest towns have gold and silver smiths, in whose shops, all castes,—whites, Mestizoes, and Indians,—are employed. Services of plate, to the value of *L.*8,000 or *L.*10,000 sterling, have been executed at Mexico, which for elegance of form and admirable workmanship, may rival the finest work of the kind ever manufactured in the most civilized parts of Europe.

The interior commerce of Mexico is of comparative insignificance, chiefly from the unequal distribution of the population over such an immense surface, and the absence of good roads and navigable rivers. The foreign commerce may be divided into the following branches: namely, that with China,—that with Peru,—and that with the West Indies and Spain. The former is conducted at the port of Acapulco,—the latter at Vera Cruz. The foreign commerce of Mexico employed 388 ships in 1824, viz.:

Arrived	from national ports,	39	Sailed	for national ports, .	80
	from America, .	76		for America, .	100
	from Europe, . .	61		for Europe, . .	32
		76			212

After considering the commerce of New Spain in all its branches, contraband included, Mr Humboldt gives the following estimate of its total amount:—

		Dollars.
Annual importation of foreign goods, - - -		20,000,000
— exportation of produce, - - - - -		6,000,000
Balance to be discharged in money, - - -		14,000,000
Annual produce of the mines, - - - -		23,000,000
Export of money on account of the crown, and of private individuals residing in Spain, - -	8,000,000	
Export to discharge the balance of trade, - -	14,000,000	
Money added to the circulation of the colony,	1,000,000	
		23,000,000

Though Mexico possesses mines, the richest, and most constant in their produce of any in the known world, it does not possess much specie; the whole mass in circulation, according to Humboldt, not exceeding 55,000,000 or 60,000,000 dollars, or from *L.*12,750,000 sterling to *L.*13,000,000 sterling.

CHAP. VII.—GOVERNMENT—REVENUE—MILITARY AND MARINE FORCE.

Government] The whole of Spanish North America was formerly subjected to the power of one governor, denominated the *viceroy of Mexico*. This power was afterwards divided among four personages: namely, the viceroy of Mexico, the captain-general of Guatimala, and two commandants-general of the Internal Provinces. The three latter, indeed, did not enjoy the title of viceroys, or hold the appointments belonging to that rank, but their jurisdictions were completely independent of that of the viceroy.[1]

The republic of Mexico has adopted the constitution of the North American Union as its general model. The government is federal—and the republic is entitled the *United Mexican States*. Like the North American union, the United Mexican States possess a general legislative, a general executive, and a general judicial power, together with a legislative, executive, and judicial power for each state. The provincial authorities and legislatures are still proceeding with the formation of their separate codes. The general or federal legislature consists, as in North America, of a House of Deputies, and a Senate. The election of the former, as in North America, takes place every two years. The basis of the nomination of deputies, is the extent of population. A deputy is to be elected for every 80,000 souls, or for any fraction of that number which shall exceed 40,000. For proportioning the number of deputies

[1] The Spanish-American viceroys, formerly, not only represented the royal person of their sovereigns, but exercised his royal prerogatives, within the precinct of their respective governments, to the utmost extent. Latterly, however, their privileges were greatly curtailed. The salary attached to the office of viceroy of Mexico was 60,000 dollars, or L.13,000 sterling, annually; besides 50,000 dollars for his table, or L.24,750 sterling in all. The viceroy, however, had various means of increasing his income. Instances have occurred, of viceroys, who, in the course of their administration—usually not exceeding five years—contrived to amass upwards of L.330,000 sterling. The marquis de Sirralvo, who was viceroy in the reign of Philip IV., made his office worth 1,000,000 dollars annually. Instead of 60,000 dollars, the chevalier de Croix, Buccarelli, and the marquis de Branciforte, brother-in-law to the infamous Godoy, had while they held the office of viceroy, an annual income of 84,000 dollars.

over the union, a census of the population is to be made every ten years. The Senate is to be composed of two senators for every state, chosen by the separate state-legislatures. The meeting of the two bodies of deputies and senators is called the *General Congress.* They are to be paid for their attendance. The ordinary session of congress is to begin on the 1st of January, and to end on the 15th of April. When extraordinary sessions are held, the specific subject of deliberation must be determined in the decree by which the legislative bodies are convoked. The executive power of the Mexican federation is to reside in a single person, called the President of the United Mexican States. This supreme magistrate is to be elected by the separate state-legislatures, each of which is to nominate two candidates for the presidency—one of whom at least, shall not belong to the state which makes the return. The names of these candidates are to be transmitted to the general congress, which shall declare president, the candidate who unites in his person the greatest number of votes. The duration of the president's functions is limited to four years. A Vice-president is likewise elected in the same manner, and for the same term, to supply the president's place, if by physical inability, or any other cause, he should be prevented from discharging the duties of his office. The powers and prerogatives of the president are similar to those of the same magistrate in the North American union. He appoints or removes the secretaries of state,—he appoints to posts in the army and navy,—he disposes of the armed force by sea and land, in peace or war, by the advice of the congress,—he convokes the legislative bodies to an extraordinary session,—he provides that justice be duly administered,—he promulgates the acts of congress, and does other acts of supreme power. During the recess of congress, the supreme magistrate is provided with a council, consisting of half the members of the senate, or of a councillor for every state of the union. The judicial power of the federation is to reside in a supreme tribunal of justice, and in circuit courts. The first is to consist of 11 members, distributed into three halls or chambers. The members of this supreme tribunal are to be elected, like the president, by a majority of votes of the different state-legislatures. The duties of this supreme tribunal are: to take cognizance of the differences which may arise between the separate states of the federation, or between the authorities of one state and the subjects of another,—to settle disputes which may spring up respecting the construction of the acts of the supreme government,—to decide on the jurisdiction of the separate tribunals of the union,—and to judge, without appeal, in the trial of criminal cases affecting senators, deputies, ambassadors, consuls, or any of the higher officers of the supreme government. Each of the state-governments moves uncontrolled within its own sphere, but all partake of the movement and obey the influence of the general federative system.

Revenue.] The net, or clear revenue of New Spain, exclusive of Guatimala, was estimated at 20,000,000 dollars, or £4,500,000 sterling; of which 6,000,000 dollars, or £1,350,000 sterling, were annually sent to Spain; and 14,000,000 dollars, or £3,150,000 sterling absorbed in government-expenses.[2]

[2] The following tables will give the reader a view of the progressive increase of the public revenue since the commencement of the 18th century:

REVENUE.

Years.	*Dollars.*	£	*s.*	*d.*
1712,	3,068,400	690,390	0	0
1763,	5,705,876	1,283,822	2	0

By a report presented to the congress of Mexico in 1825, from a commission consisting of four members of the senate, whose signature it bears, the following estimate of the revenue and expenditure for that year is given, viz.—

RECEIPTS.

Duties on Importation and Exportation,	Doll. 3,275,732	6	6
Duties on Introduction into Consumption,	1,868,223	1	10
Revenue from Tobacco,	1,044,925	1	9
Revenue from Gunpowder,	84,303	0	1
Alcabala on Tobacco,	39,784	7	0
Post-office, Posts, &c.	164,246	2	10
Lotteries,	70,136	7	8
Salt Mines,	80,000	0	0
Territories of the Federation,	26,517	3	4
National Property,	42,245	3	10
Tithes,	529,989	5	2
Rents of the See of Mexico,	86,929	7	0
Rents of the Dignity of Treasurer,	8,194	3	0
Contingent of the States,	2,317,127	5	4
Averia,	169,664	5	11
Peage,	37,454	4	0
Government Claims,	55,579	3	8
Foreign Loan,	2,476,315	4	7
	Doll. 12,377,371	1	6

EXPENDITURE.

Estimate of the Home and Foreign Departments,	Doll. 105,737	0	0
Do. of the Department of Justice,	77,220	0	0
Do. of the do. of War,	6,990,880	1	10
Do. of the do. of Marine,	1,310,785	6	0
Do. of the do. of Finance,	1,083,143	1	3
Arrears,	724,871	6	7
	Doll. 10,292,637	7	8
Excess of the Revenue above the Expenditure,	Doll. 2,084,733	1	10

On this statement the report contains the following remarks:—"From the preceding comparison it appears, that the ordinary expenses of the year 1825, are not only covered by the ordinary produce of the revenue, and the remains of the first loan, but that there is a very considerable surplus; and that the proceeds of the new loan remain untouched, to

1764,	5,901,706	1,327,883	13	0
1765,	6,141,981	1,381,945	11	1¼
1766,	6,538,941	1,471,261	14	6
1767,	6,561,316	1,476,296	2	0
Total, from 1763 to 1767,	30,849,820	6,941,209	2	7¼
Average of these five years,	6,169,964	1,388,241	18	0

ANNUAL AVERAGE.

	Dollars.	£	*s.*	*d*
From 1767 to 1769,	8,000,000	1,800,000	0	0
—— 1773 to 1776,	12,000,000	2,700,000	0	0
—— 1777 to 1779,	14,500,000	3,262,500	0	0
—— 1780 to 1784,	18,176,479	4,089,707	15	6

ANNUAL REVENUE.

	Dollars.	£	*s.*	*d.*
In 1785,	18,770,000	4,223,280	0	0
— 1789,	19,044,000	4,284,900	0	0
— 1792,	19,521,698	4,392,282	1	0
— 1802,	20,200,000	4,545,000	0	0

The causes of this great increase of revenue were owing to the diminution of the price of mercury, and consequent increase of mineral produce,—greater freedom of trade,—the monopoly of tobacco,—and several other financial measures of government.

meet any extraordinary expenses that may occur." The only foreign loans which Mexico has contracted are :—

A five per cent loan in 1824, for	£3,200,000
Of which there has been redeemed, and is now in course of redemption,	800,000
	2,400,000
And a six per cent loan in 1825, for	3,200,000
Of which there has been redeemed, ...	21,500
	£3,178,500

Military Force.] Of the military force of Mexico, under the ancient regime, we have different enumerations by Estalla, Humboldt, and Pike. According to Estalla, the whole of the military force belonging to New Spain, including garrisons, were 43,191. According to Humboldt, the whole of the peace-establishment in 1804, consisted of 32,196 men, divided into regulars and militia,—exclusive of the military in the peninsula of Yucatan, and the captaincy of Guatimala. In the Mexican army the cavalry were extremely numerous, composing almost the one-half. Pike stated the effectual disciplined force of Mexico at 23,288 men, of whom 6,000 were Europeans, the rest Creoles. In addition to this regular army, and trained militia, he estimated the undisciplined militia at 30,500 men, besides 109,000 armed citizens, furnished with bows, arrows, and lances; making a total of 162,788 men. The army of the republic in 1828, amounted to 58,955 men.

Marine Force.] The marine force of the republic consisted in 1828, of one vessel of the line, one frigate, and 11 smaller war-vessels.

CHAP. VIII.—TOPOGRAPHY.

City of Mexico.] Mexico, the capital of Spanish America, is situated in 19° 25′ 45″ N. lat., and 99° to long., according to Humboldt and Oltmanns ; or 43′ E. and 32′ N. of the position assigned by Arrowsmith. It is built on the site of Old Mexico, and forms a great square, of which each side is nearly 9,021 feet. The streets are very straight, long, broad, remarkably well-paved, clean, and well-lighted. Sewers and water-courses are opened in the greater part of the streets, and the footpaths are raised to carry off the water. The architecture is noble, and the exterior of the houses is not loaded with ornaments; nor have they any of those wooden balconies and galleries, which disfigure so many European cities in both the Indies. The balustrades and gates are all of Biscay iron, ornamented with bronze; and the houses, instead of roofs have terraces, like those in Italy and other southern countries. On these accounts, combined with the uniform level of its site, the surrounding scenery, and the beautiful architecture of its numerous buildings, Mexico is the finest, most august, and majestic city built by Europeans in the western hemisphere. The environs of the city are beautiful and majestic, and give to it a peculiar air of grandeur. Nothing can present a more elegant and varied appearance than the surrounding valley, when, in a fine summer morning, from the top of one of the towers of the cathedral, or from the summit of Chapoltepec, the sky is seen without a cloud, and of that deep azure which is peculiar to the dry and rarified air of high mountains. The eye sweeps over a vast plain of carefully cultivated fields, extending

to the very feet of colossal mountains covered with eternal snows; the city seems as if washed by the waters of the lake; whose basin, surrounded with villages and hamlets, resembles the most beautiful lakes of Switzerland,—large avenues of elms and poplar lead in every direction to the city,—and two aqueducts, constructed over arches of very great elevation, cross the plain, and exhibit appearances equally agreeable and interesting. The magnificent convent of Guadaloupe appears joined to the mountains of Tepeyacac, among ravines sheltering a few date and young yucca trees. Towards the south, the whole tract between San Angel, Tacabaya, and San Augustin de las Cuivas, appears as one immense garden of orange, peach, apple, cherry, and other European fruit trees. This beautiful cultivation is singularly contrasted with the savage appearance of the naked mountains surrounding the valley, among which, the two famous volcanoes of Popocatepetl and Istaccihuatl, are the most distinguished. The former of these forms an enormous cone, the crater of which, continually inflamed and throwing up smoke and ashes, opens in the midst of eternal snows.

The buildings that most attract the admiration of strangers are, the cathedral, the treasury, the convents, the hospital, the acordado, or royal prison, generally containing 1,200 unfortunate individuals, the school of mines, an edifice which cost £125,000 sterling, the botanical garden, the university and public library, the academy of fine arts, with a collection of ancient casts, and finally, the equestrian statue of Charles IV. in the Plaza Major, and the sepulchral monument of the great Cortez, both executed by Tolsa, an eminent Mexican artist. The latter is a simple family monument, adorned with a bust in bronze, representing the hero in the prime of life.

Though the parishes do not exceed 14, yet the churches are more than 100 in number. The cathedral was 94 years in building, namely, from 1573 to 1667; and contains two images of the Virgin; one of solid gold, weighing upwards of 70 lbs. troy; and the other of solid silver, weighing 55 lbs. troy. The cathedral is of great size, divided into five naves or avenues, three open for processions, and two containing chapels and altars; the length being 400 geometrical feet, the breadth, 195, with 164 windows. This edifice cost 1,752,000 dollars, or £394,200 sterling; and was adorned with a beautiful altar by Balbas, in 1743. The clergy of the city of Mexico are extremely numerous; the whole, including monks and nuns, amounting to 2,392. There are 23 monasteries, and 15 nunneries, containing 867 monks, and 923 nuns. Secular clergy, 517; curates, 43; parish priests, 16; and prebendaries, 26. The number of charitable institutions is enormous. There are 13 hospitals, a house of refuge for married women, a magdalene, a foundling hospital, a general hospital for sick, poor, and beggars, several houses for orphan girls, a charitable institution denominated the Mount of piety, a general hospital for the Indians, the expenses of which are defrayed by themselves, another hospital for the same purpose erected and supported by the descendants of Cortez, and an hospital for lepers. The civil and military officers have also a chest for the relief of their widows, who derive a revenue equal to one-fourth of their husband's salary. Nightly rounds are performed by the various municipal troops. The patroness of the city is St Mary of Guadaloupe, who was solemnly chosen to this office in 1737.

The *desague*, or drain, designed to carry off the superfluous waters of the

lake of Zumpango and San Christoval, is a magnificent work. It was begun in November 1607, by the engineer Enrico Martinez; and 15,000 Indians were compelled to toil at the work for 11 months, during which they were treated with the most unfeeling severity, till at length a subterranean passage was effected upwards of 20,000 feet in length. This first tunnel, however, filled up, owing to the caving in of the earth; and it was at length determined to make an open cut through the hill of Nochistongo, which, after encountering great difficulties and more vexatious delays, was completed in the year 1789, at the cost of the lives of some thousands of Indians. This canal, cut through clay, marl, gravel, and sand, is from 100 to 130 feet deep, and, at the summit, between 2 and 300 wide. Its length, from the sluice of Vestideros to the fall of the river of Tula, is upwards of 67,000 feet, or more than four leagues and a half.[3] The capital is still, however, exposed to inundations from the N. and N.W., in the event of any sudden swelling of the lakes in that direction, through continued rains, or any sudden or extraordinary melting of the snows on the mountains. "We descended," says a recent traveller, "to the bottom of the canal, by steps cut in the indurated clay, and were very much surprised to see only a small rivulet flowing through a canal of such vast dimensions. A large body of water passes off by means of this drain in the rainy seasons; but now, the stream is not more than a foot deep, and two or three wide. The sides of the canal are so perpendicular, that they are constantly caving in; but, from the rapidity of the current, no inconvenience has arisen from the accumulation of dirt at the bottom. On the edge of the canal, we saw small hillocks formed by the rubbish thrown out in the progress of the work: but they are now covered with verdure."

The population of Mexico, according to Estalla and Humboldt, was 142,000 in 1801, including a garrison of 5,000 men; colonel Poinsett estimated it in 1802 at between 150,000 and 160,000, and recent accounts raise it to 168,000.

QUERETARO.] This Mexican state is bounded by that of S. Louis Potosi on the N.; by Vera Cruz on the N.E.; Puebla on the E.; Mexico on the S.; Mechoacan on the S.W.; and Guanaxuato on the N.W. It is wholly situated in the great central plateau of Mexico; the principal stream is the *Tula*. The climate is temperate; and the population amounts to 55,000. Its capital of the same name, after Mexico, is the most beautiful and opulent city in all New Spain; being situated in a delicious vale, watered by a river, which is divided into numerous channels, and conveyed into 2000 gardens, producing all the fruits and flowers of Europe and Asia. From three grand squares proceed numerous streets towards the four cardinal points of the compass; and there is a celebrated aque-

[3] "The *desague*, in its actual state, is undoubtedly one of the most gigantic hydraulical operations ever executed by man. We look upon it with a species of admiration, particularly when we consider the nature of the ground, and the enormous breadth, depth, and length of the aperture. If this cut were filled with water to the depth of 30 feet, the largest vessels of war could pass through the range of mountains which bound the plain of Mexico to the north-east. The admiration which this work inspires, is mingled, however, with the most afflicting ideas. We call to mind at the sight of the cut of Nochistongo, the number of Indians who perished there, either from the ignorance of the engineers, or the excess of the fatigues to which they were exposed in ages of barbarity and cruelty. We examine if such slow and costly means were necessary to carry off from a valley closed in on all sides, so inconsiderable a mass of water; and we regret that so much collective strength was not employed in some greater and more useful object;—in opening, for example, not a canal, but a passage through some isthmus which impedes navigation."—HUMBOLDT, *Poll. Essay*, vol. ii. p. 110.

duct, supported by more than 40 arches, 35 yards in height, which cost 114,000 dollars or £25,650 sterling. The aqueducts are in general the most beautiful objects of architecture in New Spain. The parochial church is magnificent.

MECHOACAN.] This state, which formed an independent Indian kingdom when the Spaniards first arrived under Cortez, was conquered in 1524 by Christoval de Olid. It then extended from the mouth of the river Zacatula to the port of Natividad, and from the mountains of Zala to the river Lerma. It is now bounded by the state of Guanaxuato on the N.; on the E. and S. by Mexico; on the S.W. by the Pacific; and on the N.W. by Xalisco. Its extent in square leagues is 3,460; and the present population is supposed to amount to 400,000 souls. A branch of the Anahuac cordilleras enters it on the N.E., and covers a large portion of the superficies with its numerous ramifications. The most remarkable point in these mountains is the volcano of *Jorullo*, or *Xorullo*, already mentioned. The *Rio Grande*, or *Lerma*, waters the N.E.; and the *Colima*, the S.W. portion of this country. The soil is in general fertile, producing wheat, maize, potatoes, melons, ananas, sugar-cane, citron, indigo, and lint. The whole commerce is with Mexico; and the only port which this state possesses is the mouth of the Colima, which is capable of receiving small vessels.—The principal town is *Valladolid de Mechoacan*, situated in 19° 42′, which in 1803 contained a population of 18,000 souls.

GUANAXUATO.] This state, comprising the ancient intendancy of the same name, is bounded on the N. by the state of S. Luis Potosi; on the E. by that of Mexico; on the S. by that of Valladolid; and on the W. by those of Xalisco and Zacatecas. It lies wholly on the ridge of the Cordilleras, the most elevated point being, according to Humboldt, 1,539 toises above the level of the sea. The Rio Grande runs through its southern portion towards the lake of Chapalo, of which the eastern extremity belongs to that state. There are no other navigable streams. The climate is in general agreeable; but epidemics are frequent; and the country was ravaged by a disease of this species in 1823. The soil is fertile, particularly along the Rio Grande, and produces sugar, oil, wine, pepper, oranges, lemons, mulberries, and nopal. The mineral wealth of this state—already noticed—renders it one of the most important of the Mexican confederacy. Industry and the arts have made considerable progress in Guanaxuato within the last few years; but its commerce is yet chiefly with Mexico, and nearly limited to the exportation of the precious metals. This state, in 1803, contained a population of 517,300 souls, one-third of whom were Indians, on a surface of 911 square leagues. In 1825, the governor reported the population at only 382,829 souls. From October 1824 to October 1825, its revenue amounted to 247,810 piastres, and its disbursements to 264,010 piastres. It is divided into 33 parishes, and comprises the 3 cities of *Guanaxuato*, *Celaya*, and *Salvatierra*, besides the 5 towns of *S. Miguel el Grande*, *Leon*, *S. Felipe*, *Salamanca*, and *Irrapuato*.

City of Guanaxuato.] The city of *Santa Fe de Guanaxuato* (or, as it is sometimes written and pronounced, *Gonnajoato*) is situated in N. lat. 21° 0′ 15″, in a narrow valley of the Sierra de Santa Rosa. "Nothing can be more ruinous and gloomy," says the author of Notes on Mexico, "than the approach to the city; but, on leaving the bed of the river, we ascended a steep projecting rock, and entered a street, skirting a ravine,

supported by a lofty stone wall, having houses on only one side of it. We soon found ourselves in the heart of the town, winding along crooked, narrow streets, and across open spaces, which cannot be called squares, for they are irregular and of indescribable forms, most of them filled with market-stalls. The houses present a very singular appearance. They are spacious and well built, of hewn stone, but the fronts have been newly painted, and of the gayest colours: light green is the favourite; and some exhibit the colours of the Three Guarantees of the Plan of Iguala,—white, green, and red, which are now the national colours of Mexico. We were conducted to the custom-house, where we had only to make a declaration that we had not more than one thousand dollars with us, and were suffered to proceed to the *mesón*. A traveller is allowed to carry with him a sum not exceeding a thousand dollars, without paying duty. Our *mesón* is very comfortable. We have two rooms up stairs, that look on the street, with a table and a bench in each. Our matresses are on the floor, but then it is paved, and the white-washed walls are almost clean." The city of Guanaxuato was founded by the Spaniards in 1554. It was constituted a town in 1619, and invested with the privileges of a city in 1741. According to M. Humboldt, the population of Guanaxuato, in 1802, was, within the city, 41,000,—in the suburbs and adjacent mines, 29,600,—total, 70,600; but from a census taken in May 1822, the inhabitants of the city appear to have been then only 15,379, and the total population only 35,733.

ZACATECAS.] "This singularly ill-peopled province," says Humboldt, "is a mountainous and arid tract, exposed to a continual inclemency of climate. It is bounded, on the N., by the intendancy of Durango; on the E., by San Luis Potosi; on the S., by Guanaxuato; and on the W., by Guadalaxara. Its greatest length is 85 leagues, and its extreme breadth, from Sombrerete to the Real de Ramos, 51 leagues; being nearly of the same extent with Switzerland, which it resembles in many geological points of view. The relative population is hardly equal to that of Sweden." The extent of surface is computed to be 2,355 square leagues; the population, in 1803, was 153,300, or 65 only to the square league. The table-land which forms the centre of the intendancy, and which rises to an elevation of upwards of 6,500 feet, is formed of syenite, on which repose strata of primitive schistus and schistous chlorites; the schistus forms the base of the mountains of trappish porphyry. *Zacatecas*, the provincial capital, is, next to Guanaxuato, the most celebrated mining-place in New Spain. Its population is stated by Humboldt to be at least 33,000. The mines of Zacatecas belong to the same groupe as those of Guanaxuato and Catorce. The intendancy is divided into four *diputaciones de mineria*, or mining districts: 1. *Zacatecas*; 2. *Sombrerete*; 3. *Fresnilio*; 4. *Sierra de Pinos*. The *veta negra* of Sombrerete has yielded the greatest wealth of any seam yet discovered in the two hemispheres. To the north of the town of Zacatecas, there are nine small lakes, abounding in muriate and carbonate of soda. The carbonate, which goes by the name of *tequesquite* (corrupted from the Mexican word *tequixquilit*), is of great use in the dissolving of the muriates and sulphurets of silver. "The central table-land of Asia," adds M. Humboldt, "is not richer in soda than Mexico."

CINALOA.] Cinaloa, or *Sinaloa*, formerly formed the southern part of the intendancy of Sonora; but in 1824 assumed the rank of a federal state. It is bounded on the N. by Sonora; on the E. by Chihuahua; on

the S.W. by the Pacific; and on the W. by the gulf of California. It forms the eastern portion of the vast Mexican plateau, and declines towards the W. The climate is very warm in summer, and particularly severe in the months of December and January. The soil is watered by several streams which take their rise in the mountains of Topia. The population is mostly of Indian origin, and estimated by Pike at 60,000. *Sinaloa*, the head-town, is situated to the E. of the port of *Santa Maria d'Aome*, and contains 9,500 inhabitants.

SONORA.] This state extends from the northern frontiers of Cinaloa, along the Californian gulf to an uncertain distance northwards. The chief place is *Arispe*, near the head of the Saqui, in 31° N. lat. and 110° W. long. with a population of 7,600; and *Sonora*, S. of Arispe, with a population of 6,400.

District of Pimeria.] The most northern part of this state bears the name of Pimeria, from a numerous tribe of Indians, called Pimas, who inhabit it. "Hitherto," says Humboldt, "there has been no permanent communication established between Sonora, New Mexico, and New California, although the court of Madrid has frequently given orders for the formation of *presidios* and missions between the *Rio Gila* and *Rio Colorado*. Two courageous and enterprising monks, fathers Garces and Font, succeeded, however, in penetrating by land through the countries inhabited by independent Indians, from the missions of the *Pimeria alta*, to Monterey and the port of St Francisco, without crossing the peninsula of Old California. This bold enterprise, on which the college of the Propagando at Queretaro published an interesting notice, has also furnished new information relative to the ruins of *la Casa grande*, considered by the Mexican historians as the abode of the Aztecs on their arrival at the *Rio Gila* towards the end of the twelfth century. Father Francisco Garces, accompanied by father Font, who was entrusted with the observations of the latitude, set out from the *presidio* of Horcasitas on the 20th April, 1773. After a journey of 11 days, they arrived at a vast and beautiful plain one league's distance from the southern bank of the Rio Gila. They there discovered the ruins of an ancient Aztec city, in the midst of which is the edifice called *la Casa grande*. These ruins occupy more than a square league. The *Casa grande* is exactly laid down according to the four cardinal points, having from north to south 445 feet in length, and from east to west 276 feet in breadth. It is constructed of clay (or unburnt bricks) of unequal size, but symmetrically placed. The walls are nearly 4 feet thick. The edifice had three stories and a terrace; the stair, probably of wood, was on the outside. The same kind of construction is still to be found in all the villages of the independent Indians of the Moqui, west of New Mexico. We perceive in the *Casa grande* five apartments, each of which is about 27 feet in length, 10 in breadth, and 11 in height. A wall, interrupted by large towers, surrounds the principal edifice, and appears to have served to defend it. Father Garces discovered the vestiges of an artificial canal, which brought the water of the Rio Gila to the town. The whole surrounding plain is covered with broken earthen pitchers and pots, prettily painted in white, red, and blue. We also find among these fragments of Mexican earthenware, pieces of obsidian (*itzli*); a very curious phenomenon, because it proves that the Aztecs passed through some unknown northern country which contains this volcanic substance, and that it was not the abundance of obsidian in New Spain that suggested the idea of razors and instruments of *itzli*. We must not, however, confound the

ruins of this city of the Gila, the centre of an ancient civilization, with the *casas grandes* of New Biscay, situated between the *presidio* of Yanos and that of San Buenaventura. The latter are pointed out by the natives, on the very vague supposition, that the Aztec nation, in their migration from Aztlan to Tula and the valley of Tenochtitlan, made three stations: the first, near the lake Teguyo, to the south of the fabulous city of Quivira, the Mexican Dorado; the second at the Rio Gila; and the third in the environs of Yanos. The Indians who live in the plains adjoining the *Casas grandes* of the Rio Gila, and who have never had the smallest communication with the inhabitants of Sonora, deserve by no means the appellation of *Indios bravos* (savages). Their social civilization forms a singular contrast with the state of the savages who wander along the banks of the Missouri. Fathers Garces and Font found the Indians to the south of the Rio Gila clothed, and assembled together, to the number of two or three thousand, in villages, which they called Uturicut and Sutaquisan, where they peaceably cultivated the soil. They saw fields sown with maize, cotton, and gourds. The missionaries, in order to bring about the conversion of these Indians, showed them a picture painted on a large piece of cotton cloth, in which a sinner was represented burning in the flames of hell. The picture terrified them; and they entreated father Garces not to unroll it any more, nor speak to them of what would happen after death. These Indians are of a gentle and sincere character. Father Font explained to them, by an interpreter, the security which prevailed in the Christian missions, where an Indian alcalde administered justice. The chief of Uturicut replied: 'This order of things may be necessary for you: we do not steal, and we very seldom disagree; what use have we then for an alcalde among us?' The civilization to be found among the Indians when we approach the north-west of America, from the 33d to the 54th parallel, is a very striking phenomenon, which cannot but throw some light on the history of the first migrations of the Mexican nations. Still further north, in the country of the Moqui, watered by the *Rio de Yaquesila*, in lat. 36°, father Garces was astonished to find an Indian town with two great squares, houses of several stories, and streets well laid out in parallel directions. Every evening, the people assemble together on the terraces which form the roofs. The construction of the edifices is the same as that of the *casas grandes* on the banks of the Rio Gila. The Indians who inhabit the northern part of New Mexico, give also a considerable elevation to their houses, for the sake of discovering the approach of their enemies. Every thing in these countries," adds Humboldt, "appears to announce traces of the civilization of the ancient Mexicans. However, the language spoken by the Indians of the Moqui, the Yabipais, who wear long beards, and those who inhabit the plains in the vicinity of the *Rio Colorado*, is essentially different from the Mexican language. In the 17th century, several Franciscan missionaries established themselves among the Indians of the Moqui and Nabajoa, who were massacred in the great revolt of the Indians in 1680. I have seen, in manuscript maps drawn up before that period, the name of the *provincia del Moqui*."

CALIFORNIA.] The vast peninsula of Old California now forms with that district known by the name of New California a single state of the Mexican confederacy; but it will be necessary to describe the two countries apart from each other.

Old California.] Old California extends from 22° 53′ to 32° N. lat.; and is bounded on the E. by the gulf of California, and on the S.E. and

W. by the Pacific, on the N. it is united by an isthmus 32 leagues in length to New California. Its superficies is estimated by Humboldt at 72,995 leagues; and its population at 9,000. Its coasts are deeply intersected with bays, and its shores are studded with numerous islands, among which are those of *S. Ines*, *Carmen*, *Catalana*, *Santa Cruz*, *S. Jose*, *Cerralbo*, *Santa Margarita*, and *Cerros*. A chain of mountains, apparently of volcanic origin, runs through its centre, the most elevated of which is the *Cerro de la Gigantea*, which is between 4,500 and 5,000 feet in altitude. The soil is not generally fertile, and there are no important streams; "vegetation is at a stand, and rain is very unfrequent;" the sky is constantly serene and cloudless. The pearl-fishery was long pursued here with success; but is now nearly abandoned.

New California.] New California extends from 32° to 40° N. lat.; and is bounded on the N. and E. by territories little known, inhabited by Indians; on the S.E. it is separated from the state of Sonora by the Rio Colorado, and the gulf of California. Its superficies has been estimated at 10,400 square leagues, and population at 20,330, in 1818. "It is a long and narrow extent of country, in which for these (sixty) years the Mexican government has been establishing missions and military posts. No village or *hacienda* is to be found north of the port of San Francisco, which is more than 78 leagues to the south of Cape Mendocino. The province, in its present state, is only 197 leagues in length, and from 9 to 10 in breadth. The city of Mexico is the same distance in a straight line from Philadelphia, as from Monterey, which is the chief place of the missions of New California. The soil of New California is as well watered and fertile as that of Old California is arid and stony. It is one of the most picturesque countries that can be seen. The climate is much more mild than that of the same latitude on the eastern coast of the new continent. The sky is foggy, but the frequent fogs, which render it difficult to land on the coast near Monterey and San Francisco, give vigour to vegetation, and fertilise the soil, which is covered with a black, spongy earth. In the 18 missions which now exist in New California, wheat, maize, and beans (*fricoles*) are cultivated in abundance. As the 36 monks of St Francis who govern these missions, are all Europeans, they have carefully introduced into the gardens of the Indians, the greater part of the vegetables and fruit-trees cultivated in Spain. The first colonists found, on their arrival in 1769, shoots of wild vines in the interior, which yielded very large grapes, but of sour quality. The missionaries introduced the *vitis vinifera* of Europe, which is certainly a stranger to the new continent. Good wine is made all along the coast, south and north of Monterey, to beyond lat. 37°. The European olive is successfully cultivated near the channel of Santa Barbara and at San Diego: the oil extracted is as good as that of the valley of Mexico, or the oils of Andalusia."

NEW MEXICO.] This state is formed by an extensive valley, enclosed on the W., by a chain of mountains, the southern prolongation of the Rocheux ridge; and in the E., by a ramification of the same chain called the *Sierra Obscura*, and the *Sierra del Sacramento*. It extends between the parallels of 31° and 38° N.; and is bounded on the S., by the state of Chihuahua; and on every other side by the territories of the free Indians. The *Rio del Norte*, and its tributary the *Chamas* in the S., and the *Rojo*, or *Rio de Pecos*, which appears to be the *Red River* of Louisiana in the N.E., are the principal rivers of this country. "No person," says Pike, "accustomed to reside in the temperate climate of the 36th and 37th

parallels of north latitude of the United States, can form any idea of the piercing cold experienced in that latitude in New Mexico. But the air is serene, not subject to damps or fogs, as it rains but once a year, and some years not at all. It is a mountainous country; and the grand dividing ridges which separate the waters of the *Rio del Norte* from those of California, bordering it on the line of its western limits, give a keenness to the air which would never be calculated on in a temperate zone. The cotton-tree is the sole production of this province, except some scrubby pines and cedars at the foot of the mountains. The former tree borders the banks of the *Rio del Norte* and its tributary streams. All the rest of the country presents to the eye a barren wild of poor land, scarcely to be improved by culture, and appears capable only of producing a scanty subsistence for the animals, which live on a few succulent plants and herbage. There are no mines known in the province, except one of copper, situated in a mountain on the western side of the *Rio del Norte*, in lat. 34° N. It is wrought, and produces 20,000 mule-loads of copper annually, furnishing that article for the manufactories of nearly all the internal provinces. It contains gold, but not in sufficient quantity to pay for its extraction. There is, near Santa Fé, in some of the mountains, a stratum of talc, which admits of being divided into thin flakes, of which are made the windows of most of the houses in Santa Fé and all the villages to the north. New Mexico carries on a trade direct with Mexico and Biscay, and with Sonora. It sends out annually about 30,000 sheep; also, dressed deer-skins and cabrie-skins, some fur, buffalo robes, tobacco, salt, and wrought copper vessels of a superior quality. It receives in return from New Biscay and Mexico, dry goods, confectionary, arms, iron, steel, ammunition, European wines and liquors; from Sonora, gold, silver, and cheese. The journey with loaded mules from Santa Fé to Mexico, and returning, takes five months. They manufacture rough leather, segars, a vast variety and quantity of potter's ware, cotton, some coarse woollen cloths, and blankets of a superior quality. All these manufactures are carried on by the civilized Indians, as the Spaniards think it more honourable to be agriculturists than mechanics. The Indians, likewise, far excel their conquerors in all mechanical operations. They cultivate maize, wheat, rye, barley, rice, and all the culinary plants of the same latitude in the United States; but they are at least a century behind us in the art of cultivation: notwithstanding the numerous herds of cattle and horses, I have frequently seen them breaking up whole fields with the hoe. Their oxen draw by the horns, after the French (and Spanish) mode. Their carts are extremely awkward and clumsily made. During the whole of the time we were in the country, I never saw a horse in a vehicle of any description, mules being made use of in carriages, as well as for the purpose of labour. New Mexico has the exclusive right of cultivating tobacco. The animals found in this province are, deer, elk, buffalo, cabrie, the grisly black bear, and wild horses." The population has been recently estimated at 45,000, of whom one-half are demi-civilized Indians. "It is remarkable," Humboldt observes, "that after the lapse of two centuries of colonization, the province of New Mexico does not join the intendancy of New Biscay. The two provinces are separated by a desert, in which travellers are sometimes attacked by the Cumanches Indians. This desert extends from the *Passo del Norte* towards the town of Albuquerque. Before 1680, in which year there was a general revolt among the Indians of New Mexico, this extent of uncultivated and uninhabited country was much less considerable

than it is now. There were then three villages, San Pascual, Semillette, and Socorro, which were situated between the marsh of the *Muerto* and the town of Santa Fé. Bishop Tamaron perceived the ruins of them in 1760; and he found apricots growing wild in the fields, an indication of the former cultivation of the country. The two most dangerous points for travellers are, the defile of *Robledo*, west from the *Rio del Norte*, opposite the *Sierra de Donna Ana*, and the desert of the *Muerto*, where many whites have been assassinated by wandering Indians. The desert of the *Muerto* is a plain thirty leagues in length, destitute of water. The general character of this country throughout, is an alarming aridity; for the mountains *de los Mansos*, situated to the east of the road from Durango to Santa Fé, do not give rise to a single brook. Notwithstanding the mildness of the climate, and the progress of industry, a great part of this province, as well as Old California, and several districts of New Biscay, and the intendancy of Guadalaxara, will never admit of any considerable population. The colonists of this province, known for their great energy of character, live in a state of perpetual warfare with the neighbouring Indians. It is on account of this insecurity of the country life, that we find the towns more populous than we should expect in so desert a country. The situation of the inhabitants of New Mexico bears, in many respects, a great resemblance to that of the people of Europe during the middle ages. So long as insulation exposes men to personal danger, we can hope for the establishment of no equilibrium between the population of towns and that of the country. However, the Indians, who live on an intimate footing with the Spanish colonists, are by no means all equally barbarous. Those of the east are warlike, and wander about from place to place. If they carry on any commerce with the whites, it is frequently without any personal intercourse, and according to principles, of which some traces are to be found among some of the tribes of Africa. The savages, in their excursions to the north of the *Bolson de Mapimi*, plant along the road between Chihuahua and Santa Fé, small crosses, to which they suspend a leathern pocket, with a piece of stag-flesh. At the foot of the cross, a buffalo's hide is stretched out. The Indian indicates by these signs, that he wishes to carry on a commerce of barter with those who adore the cross. He offers the Christian traveller a hide for provisions, of which he does not fix the quantity. The soldiers of the *presidios*, who understand the hieroglyphical language of the Indians, take away the buffalo hide, and leave some salted flesh at the foot of the cross. This system of commerce indicates at once an extraordinary mixture of good faith and distrust."

The Appaches.] Besides the *Utahs* who dwell near the sources of the Rio del Norte, and the *Nanahaws*, who reside to the N.W. of Santa Fé; this country is inhabited by the *Appaches*, who formerly extended from the entrance of *Rio Grande* to the gulf of California, and have waged a continual warfare with the Spaniards, with the exception of short truces, from the time that the latter pushed their conquests into the interior provinces. It is extremely difficult to say what their numbers are at the present day, but they must be very much reduced by their long and constant hostilities, together with the wandering and savage life they lead on the mountains, which is so injurious to an increase of population, and in which they are liable to be extremely pinched by famine. At the commencement of their warfare, the Spaniards used to take them prisoners, and make slaves of them; but, finding that their unconquerable attach-

ment to liberty made them surmount every difficulty and danger to return to their mountains, they adopted the practice of sending them to Cuba. This the Appaches no sooner learned, than they refused to give or to receive quarter; and in no instance have there been any taken since that period, except when surprised asleep, or knocked down and overpowered. Their arms are the bow and arrow, and the lance. The bow forms two semicircles with a shoulder in the middle; the back of it is entirely covered with sinews, which are laid on in so nice a manner, by the use of some glutinous substance, as to be almost imperceptible; this gives great force to the elasticity of the weapon. Their arrow is more than the cloth-yard of the English, being three feet and a half long; the upper part consisting of some slight rush or cane, into which is inserted a shaft of about one foot, made of some hard, seasoned, light wood; the point is of iron, cane, or stone.

CHIHUAHUA.] After the establishment of Mexican independence, the intendancy of *Durango* was constituted in 1824 a federal state under the name of Chihuahua. Inclusive of the province of *New Biscay*, and the districts of *Bolson*, and *Mapimi*, it extends from 23° 45′ to 31° 50′ N. lat.; and is bounded on the N. by New Mexico; on the E. by San Luis de Potosi; on the S. by Zacatecas and Guadalaxara; and on the W. by Sonora. It comprehends the northern extremity of the great table-land of Anahuac, and in extent of surface, is greater than that of the three united kingdoms of Great Britain, although its population did not exceed 178,200 in 1823, and of that number 7-20ths were Indians. The principal streams are the Norte and Conchos, and Nasar, which flows into the Cayman Lake. It is a wild, uncultivated country, but produces in some quarters, wheat, rice, lint, indigo, and cotton. The Bolson and Mapimi districts are inhabited by the *Apaches*, the fiercest tribe of Mexican Indians.

Durango.] Durango, or Guadiana, the principal city, is the residence of the intendant and of a bishop. It is situated in the most southern part of the province, (in lat. 25° N., and long. 107° W.) at 170 leagues distance, in a straight line, from the city of Mexico, and 289 leagues from the town of Santa Fé, in New Mexico. The elevation of the town above the sea-level, is 6,800 feet; there are frequent falls of snow, and the thermometer descends to 14° Fahrenheit below the freezing point. The city was founded in 1551: the population in 1803, was 12,000. Major Pike says 40,000. He states, also, that the city is infested, in a very remarkable manner, by scorpions. "They come out of the walls and crevices in May, and continue for about a fortnight in such numbers, that the inhabitants never walk in their houses after dark without a light, and always shift or examine the bed-clothes, and beat the curtains, previously to going to rest; after which the curtains are secured under the bed. The precautions are similar to those we take with our moschetto curtains. The bite of these scorpions has been known to prove mortal in two hours. But the most extraordinary circumstance is, that, by taking them ten leagues from Durango, they become perfectly harmless, and lose all their venomous qualities.

Chihuahua.] The town of Chihuahua was founded in 1691, and is situated in 29° N. lat., and 107° 30′ W. long. Its population was estimated by Humboldt at 11,600, and by Pike at 7000. It is thus described by the latter: "It is of an oblong rectangular form, on the eastern side of a small stream, which discharges itself into the river Conchos. At its southern extremity is a small but elegant church. In the public square

stands the church, the royal treasury, the town-house, and the richest shops. At the western extremity, there is another church for the military, a superb hospital, belonging formerly to the Jesuits, the churches of the monks of St Francis and St Dominick, the military academy, and the barracks (*quartel del tropa*). On the north-west are two or three missions, very handsomely situated on a small stream, which comes in from the west. About one mile to the south of the town is a large aqueduct, which conveys the water round it, to the east, into the main stream below the town, at the centre of which is a reservoir, whence the water is conducted by pipes to the different parts of the city; and in the public square is to be a fountain and *jet d'eau*. The principal church is the most superb building we saw in New Spain; its whole front being covered with statues of the apostles and the different saints, set in niches, and the windows, doors, &c. ornamented with sculpture. I was never within the doors, but was informed that the decorations are immensely rich. Some men whom we supposed to be entitled to credit, informed us, that the church was built by a tax of 12½ *cents* laid on each ingot of gold or silver taken out of the mines in the vicinity. Its cost, including the decorations, was 1,500,000 dollars; and when it was finished, there remained 300,000 dollars of the fund unappropriated. On the south side of Chihuahua is the public walk, formed by three rows of trees, whose branches nearly meet over the heads of the passengers. At different distances there are seats, and, at each end of the walk, circular seats, on which, in the evening, the company collected and amused themselves with the guitar, and songs in Spanish, Italian, and French, adapted to the voluptuous manners of the country. There are at Chihuahua and its vicinity, fifteen mines; thirteen of silver, one of gold, and one of copper; the furnaces for all of which are situated round the town, in the suburbs, and present, except on Sundays, volumes of smoke rising in every direction, which are seen from a distance long before the spires of the city strike the view. It is incredible, the quantity of cinders that surround the city, in piles ten or fifteen feet high. Next the creek, they have formed a bank of them, to check the encroachments of the stream, and it has presented an effectual barrier. I am told, that a European employed some hands, and wrought at the cinders, and that they yielded 1 dollar 25 cents for each per day; but this not answering his expectations, he ceased his proceedings. At Mauperne, there are one gold and seven silver mines."

COHAHUILA.] The state of Cohahuila, or *Coaguila*, is bounded on the N.E. by the Texas, on the E. by New Santander, on the S.E. by New Leon, on the S. by Zecatecas, and on the W. and N.W. by Durango. Its greatest length is 500 miles, and greatest width 200. The face of the country is mountainous; the northern part is watered by the Rio de las Nueces; and the Rio del Norte traverses the centre. A good deal of grain is raised in this state, and excellent wine is manufactured. Humboldt estimated its population, in 1793, at 13,000; while Pike, in 1806, raised it to 70,000. It is divided into four presidios, viz.: *San Fernandez, Montelovez, Rio del Norte, and Santa Rosa.* The capital, Montelovez, or *Monclova*, is situated in 26° 33′ N. lat., and contains 3,500 inhabitants. *Santa Rosa*, on the Millada, has 4000 inhabitants.

NEW SANTANDER.] This is a very desert district, extending 500 miles from N. to S., and 150 in breadth. The population is estimated at only 38,000 souls. It is bounded on the W. by New Leon and Cohahuila.

NEW LEON.] This state is 250 miles in length, extending between the

parallels of 23° 50′ and 27° 35′. It is bounded on the N.W. by Cohahuila, on the W. by Chihuahua, on the S. by Zacatecas and San Luis Potosi, and on the E. by New Santander. It is a mountainous country, intersected by the river Tigre in the centre, and the Sabinas in the N. Pike estimates its population at 30,000 souls, exclusive of the tribe of independent Indians, called *Bravos*, who are settled to the N. of the Tigre, and in the environs of the Sabinas. Its capital, *Monte Rey* is situated, in N. lat. 26°, on the Tigre. Its population is said to amount to 11,000 souls.

San Luis Potosi.] Under the vice-regal government, the intendancy of San Luis Potosi comprehended the whole of the N.E. part of the kingdom, including a surface of 27,000 square leagues—an extent larger than that of all Spain. Its population, however, was thought not to exceed 334,900. It had upwards of 230 leagues of coast, but without commerce and without activity; while the interior was, for the most part, a wild desert, still more thinly peopled than the governments of Asiatic Russia. In the distribution of Mexico into federal states, the northern provinces of Leon, New Santander, and Cohahuila, have been separated from San Luis Potosi. The Texas has also been erected into an independent state. The town of San Luis is situated in 22° N. lat. and 103° W. long. Humboldt states its population at 12,000; a more recent traveller at 15,000; and Pike at 60,000!

Vera Cruz.] This province extends along the Mexican gulf, from the Rio Baraderes to the Panuco. It is bounded on the E. by the peninsula of Merida· on the W. by Oaxaca, La Puebla, and Mexico; and on the N. by New Santander. Its length is about 210 leagues, but within this distance is comprehended a great diversity of climate. The features of the country, the aspect of the sky, the forms of plants, the figures of animals, the manners of the inhabitants, and the kind of cultivation, assume a different character at ever stage of our progress. "As we ascend, nature gradually appears less animated, the beauty of the vegetable forms diminishes, the stems become less succulent, the flowers of less vivid colours. The appearance of the Mexican oak quiets the alarms of travellers newly landed, by demonstrating that he has left behind the zone under which the *vomito* exercises its ravages. Thick forests of styrax and other balsam trees, near Xalapa, announce by the freshness of their verdure, that this is the elevation at which the clouds come in contact with the basaltic summits of the Cordillera. A little higher, near *La Blanderilla*, the nutritive fruit of the banana no longer comes to maturity; and in this cold and foggy region, necessity spurs on the Indian to labour, and excites his industry. At the height of San Miguel, pines begin to mingle with the oaks, which are found by the traveller as high as the elevated plains of Perote, where he beholds the delightful aspect of fields sown with wheat. Between three and four thousand feet higher, the coldness of the climate will no longer admit of the vegetation of oaks; and pines alone there cover the rocks, the summits of which enter the zone of perpetual snow. Thus, in a few hours, the naturalist, in this wonderful country, ascends the whole scale of vegetation, from the heliconia and the banana plant, whose glossy leaves swell out into extraordinary dimensions, to the stunted foliage of the resinous trees." This state contains about 160,000 inhabitants. The seaport of Vera Cruz was founded towards the end of the 16th century. Mr Bullock, who visited Mexico in 1823, thus describes the appearance of this city: "Many of the houses of Vera Cruz are large, some three stories high, built in the old Spanish or Moorish style, and generally enclosing a

square court, with covered galleries. They have flat roofs, glass windows, and are well adapted to the climate: most of them have balconies of wood in front, and the interior arrangement is the same as in Old Spain. The whole town, as well as the castle, is built of coral (the *madrepora meandrities*), and the lime that forms the cement is of the same material: it is used for the roofs and foot pavement, and is so hard that in some places it receives from friction a polish like marble. There is one tolerably good square, of which the government-house forms one side, and the principal church the other. The foot-paths are frequently under piazzas, a great accommodation to passengers, protecting them from the sultry heat of the sun, and the heavy rains, which descend in torrents in the wet season. Sixteen cupolas or domes are counted from the sea, but only six churches are now in use. Indeed, nearly all the churches, monasteries and nunneries here, have been abandoned, and are fast falling into decay, since the place has been lost to the Spaniards. Nothing is more repulsive to strangers accustomed to the bustle of European cities, than the gloomy death-like appearance of the place. Of any other city it is considered a disgrace to say that grass grows in the streets, but here it would be a compliment, for no vegetation is to be observed even for miles around; and fish is the only article of provision not brought from a distance. The only water fit to drink is what falls from the clouds, and is preserved in tanks; that from the castle and the convent of Franciscans being the best. Though the markets are tolerably well supplied by the Indians, living at the hotels is expensive and very uncomfortable. Provisions are dear, with the exception of fish, which, as already stated, is in abundance and good. Some beautiful and curious Mangrove oysters were the largest and finest flavoured I ever met with. Milk is scarcely to be had, as not a cow is kept within many miles, and what is, perhaps, peculiar to Vera Cruz, there is not a garden even near it. The absence of vegetation attests at once the poverty of the soil and the insalubrity of the climate. I know not whether prejudice may not have influenced my decision, but to me, Vera Cruz appears the most disagreeable place on earth; and its character of being the most unhealthy spot in the world, naturally makes the stranger shudder every hour he remains within its walls, surrounded by arid sands, extensive swamps, and savannahs, the exhalations from which are removed only by strong winds. "Society here, as may be anticipated, is extremely confined, and morality at a very low ebb. Few of the European merchants, whom the hopes of gain have allured to reside here, are married. One class of the occupants will excite some surprise in persons unacquainted with tropical regions: I mean the carrion vultures. They are as tame in the streets as domestic fowls; and, like the dogs from the mountains at Lisbón, act as the scavengers of the place, very speedily clearing away whatever filth may be left. Their senses of smell and sight are very acute. While I was preserving some fishes in an apartment at the top of the hotel, the surrounding roofs were crowded with anxious expectants; and when the offal was thrown out, it was with much contention greedily consumed. They are on good terms with the dogs, and the two animals may be frequently seen devouring the same carcase. They pass the night on the roofs of the churches, where I have sometimes observed several hundreds."

The town of *Xalapa*, finely situated at the foot of the mountain of Macultepec, contains 13,000 inhabitants.

OAXACA.] This fine country is bounded on the N. by Vera Cruz;

on the E. by Guatimala; on the S. by the Pacific; and on the W. by Puebla. Its superficial extent is 4,447 square leagues, and its population, in 1808, was 600,000 souls. "The intendancy of Oaxaca," says Humboldt, "is one of the most delightful countries in this part of the globe. The beauty and salubrity of the climate, the fertility of the soil, and the richness and variety of its productions, all minister to the prosperity of the inhabitants; and this province has accordingly been, from the remotest period, the centre of an advanced civilization. The vegetation is beautiful and vigorous throughout the province, and especially half way down the declivity of the table-land, in the temperate region, where the rains are very copious from May to October. This intendancy alone has preserved the cultivation of the cochineal, a branch of industry which it formerly shared with Puebla and New Galicia." The mines are not very considerable: hitherto, at least, they have not proved very productive. "The intendancy of Oaxaca, says Mr Robinson, "in the region of New Spain, appears most favourable to the production of the important article of cochineal. In no other part of Mexico does the *nopal* (on which tree the cochineal insect subsists) flourish so well. Its propagation has been unsuccessfully attempted in various other provinces; but not only do the climate and soil appear peculiarly adapted to this plant in Oaxaca, but the Indians have, by a long course of practice, acquired so much experience in the manner of cultivating the nopal, and collecting the insects, as to preclude all rivalship in any of the other provinces. In some years there have been produced, in Oaxaca, 400,000 pounds weight of cochineal; this is worth in Europe, even during peace, about 1,600,000 dollars. During war, it has frequently sold in England at 25*s*. per pound. The poor Indian who collects this precious commodity, barters it for manufactured goods to the Spanish shop-keepers in the villages. The extortion of these men, together with the exactions of the government and the priesthood, leave to the Indian a miserable return for his care and industry; but we have no doubt, that if these unjust and unnatural restrictions on the labour of the natives were removed, the intendancy of Oaxaca would, in a very few years, produce above a million of pounds of cochineal per annum. The mountains of this intendancy, particularly those of the Mistica, are likewise peculiarly adapted to the growth of the mulberry-tree. Many years ago, the experiment was made, and it succeeded so well, that it awakened the jealousy of the European Spaniards; and they created so many obstacles to the manufacturing of silk in Oaxaca, that the Indians became exasperated, and in one night destroyed every mulberry-tree in the intendancy; since which time no attempts have been made to renew its culture. The indigo of the district of Tehuantepec is superior in quality to that of Guatimala; but as there are no ports open to foreign commerce along the coast of the Pacific ocean, in the vicinity of Tehuantepec, nor, indeed, on any part of the coast of Oaxaca, the inhabitants have not been stimulated either to the culture of that, or of the cotton-plant, or of the sugar-cane, except so far as is absolutely necessary to supply their own immediate consumption.

In all the mountainous districts of Oaxaca, and more especially in the spacious valleys which are situated from 2,500 to 6,000 feet above the level of the sea, we find a soil and climate at least equal, if not superior, to any on the globe. There is not a single article raised in the temperate zone that would not here find a congenial region. Wheat and all kinds of grain yield a return to the cultivator equal to that of the most fertile parts of Europe. The fruits and vegetables of Oaxaca are unrivalled for luxuri-

ance and delicacy. Peaches, pears, apricots, and strawberries, are here to be found of a size and flavour superior to those of the S. of France; and the variety and excellence of the grape point out the valleys of Oaxaca as the great future vineyards of New Spain. Asparagus, artichokes, turnips, cabbages, and all the various productions of horticulture, grow to a size and perfection we have never beheld elsewhere. To all these important natural advantages of this favoured country, must be added that of its mineral productions. Sôme of the most valuable gold mines of New Spain are in this province; but they have not yet been extensively worked, inasmuch as the attention of the directors of the mining establishments in Mexico has been principally directed to the mines of Guanaxuato, and of other provinces, silver mines being considered more profitable than those of gold. The Indians of the Upper and Lower Misteca, as well as those of the district of Tehuantepec, collect grains of gold in the beds of the rivulets that flow through the mountains; and larger masses of gold have been found in Oaxaca than in any other part of New Spain. Indications of silver ore are likewise discoverable in all the mountainous districts; but as yet scarcely any attention has been paid to them. In fact, there cannot be a doubt that this province abounds in all the precious minerals; and when the use of machinery shall be introduced, and the restrictions on human industry and enterprise be removed, this province will yield as much gold and silver as any other in America. It is worthy of remark, likewise, that copper and iron ore have been found in different parts of Oaxaca. In the village of *Yanhuitlan*, there is a large piece of metal which the blacksmiths of the place use as an anvil. It was found on the summit of a hill near the village, and is of an extraordinary height for its dimensions. Various attempts have been made to fuse it, but it has resisted the most intense heat." *Oaxaca*, sometimes written *Guaxaca*, the capital, is a handsome city built in the site of the ancient Huaxyacac. Its population, in 1808, was 38,000. The only port is that of *Tehuantepec*, at the mouth of the Chimalapa. It will be observed, on turning to a map, that the distance from the Atlantic to the Pacific ocean is very small between the bay of Tehuantepec and the port of Guasacualco; and that the sources of the latter river and the Chimalapa, approach each other under the parallel of 16° N. These circumstances suggested to the viceroy, Revillagegedo, the project of a canal to connect the two seas; but the scheme was defeated at the Spanish court by the intrigues of interested parties, and has not yet been successfully revived.

We subjoin, in a note, Humboldt's observations on this important project, that the reader may be enabled to compare them with the observations we shall afterwards have occasion to make on the practicability of uniting the two great oceans in another quarter.[4]

[4] A fortunate accident, Humboldt informs us, towards the end of the last century, was the means of directing the attention of the Mexican government to this part of the isthmus. There was discovered, in 1771, at Vera Cruz, amongst the artillery of the castle of San Juan de Ulua, several pieces of cannon, cast at Manilla. As it was known that, before the year 1767, the Spaniards neither doubled the cape of Good Hope nor cape Horn, in their voyage to the Philippine islands, and that since the first expeditions of Magellan and Loysa, who set out from Spain, all the commerce of Asia was carried on in the galleon of Acapulco, they could not conceive how these guns had crossed the continent of Mexico on their way from Manilla to the castle of Ulua. The extreme difficulty of the road from Acapulco to Mexico, and from thence to Xalapa and Vera Cruz, rendered it very improbable that they should come by that way. In the course of their investigations, they learned both from the chronicle of Tehuantepec written by father Burgoa, and from the traditions preserved among the inhabitants of the isthmus of Huasacualco, that these guns were cast at the island of Luzon, and landed at the bar of San Francisco; that they had ascended the bay of Santa Teresa, and the Rio Chimalapa; that they had been carried by the farm of Chivela and the forest of Tarifa

LA PUEBLA.] The state of La Puebla, which once formed the republic of *Tlasca*, or *Tlascala*, is bounded on the N.E. by that of Vera Cruz; on the E. by Oaxaca; on the W. by Mexico; and on the N.W. by Queretaro. The Popocatepetl and Iztacchihuatl, the highest points in the cordillera of Anahuac, are within this district. The principal river is the *Nasca*. The population, in 1803, was estimated at 813,300 souls. The principal city, which gives its name to the province, is situated in the plain of Acaxate, in 19° N. lat. It was founded in 1533, and its present population is estimated at 67,000 souls. It is a neat and elegant city, and contains no fewer than 69 churches, some of which in their interior decorations surpass those of Milan and Rome.

YUCATAN.] The state of Yucatan, formerly *Merida*, is separated on the S.W. from Vera Cruz by the Baraderas river, and extends N.E. to cape Catoche, in 21° 30′. It consists of a vast plain intersected from N.E. to S.W. by a chain of hills. "The country which extends E. from these hills towards the bays of Ascension and Espiritu Santa, appears to be the most fertile part, and was the earliest inhabited. The ruins of European edifices in the island of Cozumel, in the midst of a grove of palm-trees, indicate that that island, now uninhabited, was, at the commencement of the conquest, peopled by Spanish colonists. Since the settlement of the English between Omoa and the Rio Hondo, the government, to diminish the contraband trade, concentrated the Spanish and Indian population in that part of the peninsula which is west of the mountains of Yucatan.

to the Rio del Malpasso; and that, after having been again embarked, they descended the Rio Huasacualco, to its mouth in the gulf of Mexico. It was then very reasonably observed, that this road, which had been frequented in the beginning of the conquest, might still become very useful for the opening a direct communication between the two seas. The viceroy, Don Antonio Bucareli, gave orders to two able engineers, Don Augustin Cramer and Don Miguel del Corral, to examine with the greatest minuteness, the country between the bar of Huasacualco and the road of Tehuantepec; and he instructed them at the same time to verify whether, as was vaguely supposed, among the small rivers of Ostuta, Chicapa, or Chimalapa, there was none which in any of its branches communicated with the two seas. From the itinerary journals of these two engineers, of whom the former was lieutenant of the castle of Ulua, I drew up my map of the isthmus of Tehuantepec. They found that no river discharged at the same time its waters into the South sea and the Atlantic ocean; that the Rio Huasacualco did not take its rise, as the viceroy had been informed, near the town of Tehuantepec; and that, on ascending it beyond the cataract, even as far as the old *desembarcadero* of Malpasso, they were still more than 26 leagues distant from the shores of the South sea. They observed that a chain of mountains, of very inconsiderable height, divides the waters between the gulf of Mexico and the gulf of Tehuantepec. This small cordillera stretches from east to west, from the Cerros de los Mixes, formerly inhabited by a wild and warlike tribe, towards the elevated table-land of Portilla de Petapa. The engineer, Cramer, affirms, however, that to the south of the village of Santa Maria de Chimalapa, the mountains form a groupe rather than an uninterrupted chain, and that there exists a transversal valley, in which a canal of communication might be cut between the two seas. This canal, which would unite the Rio de Chimalapa with the Rio del Passo (or Malpasso), would be only six leagues in length. The boats would ascend the Rio Chimalapa, which affords a very easy navigation from Tehuantepec to the village of San Miguel; and from thence, they would pass by the canal projected in the time of Count de Revillagigedo, to the Rio del Passo. This river discharges itself into the Rio de Huasacualco near the *Bodegas de la Fabrica*; but its navigation is extremely difficult on account of the seven rapids (*raudales*) which are counted between its source and the mouth of the Rio de Saravio. It would be of infinite importance again to order this ground to be examined by intelligent engineers, to determine whether, as was believed by M. Cramer, the canal between the two seas can be executed without locks, or without inclined planes, and whether, by blowing up the rocks with powder, the beds of the rivers Passo and Chimalapa can be deepened. The isthmus is rich in cattle, and would, from its great fertility, supply valuable productions for the commerce of Vera Cruz. The fine plains of Tehuantepec would be susceptible of irrigation from the Rio de Chimalapa: in their present state, they produce a little indigo and cochineal of a superior quality.

Colonists are not permitted to settle on the eastern coast, on the banks of the Rio Bacalar and Rio Hondo; and all this vast country remains uninhabited, with the exception of the *presidio* of Salamanca." The chief towns are *Merida* with a population of 10,000 souls; *Campeche* with a resident population of 6,000; and *Valladolid*.

PROVINCE OF TEXAS.] The frontier province of Texas is bounded by the Sabine river on the E.; the Rio del Norte on the W.; the upper part of the Red river on the N.; and the gulf of Mexico on the S. Our knowledge of this extensive province—containing, according to Humboldt's table, a surface of 84,000 square miles, and according to others 100,000—is still very imperfect, and almost solely derived from Pike's journal of his hasty return from Chihuahua, guarded all the way by Spanish dragoons to prevent him taking notes. But its rising political and commercial relations with the United States will soon disperse this ignorance. By an act of the Mexican congress it has been united to the province of Coahuila, under the name of *Coahuila-y-Texas*. This province is exceedingly well watered, as before shown in our account of the Mexican rivers; and is the most fertile of all the Mexican states. The large and beautiful savannahs, waving with grass, feed vast numbers of wild horses and mules, which are exported in great numbers to other parts of Mexico, and to the United States, and form at present a chief article of commerce. Immediately to the W. of the Sabine, the soil is rich without being low, and for a space of 12 successive miles, is covered with magnificent pines. W. of this again is one of the richest and most fertile tracks in nature, diversified by hills and dales, and divided, as it were, into natural meadows and shrubberies, in such admirable order, as to seem the work not of nature but of art; this soil is rich, friable, and contains much iron. It is as fertile on the hills as on the plains, and the climate is delightful, being neither too warm nor excessively cold. The tract between the Sabine and Brassos rivers is occupied by 2,500 American families, emigrants from the United States, who raise cotton, maize, tobacco, rice, and sugar-canes. Besides these emigrant families, about 600 Spanish families are congregated in the vicinity of Nacogdoches, and inhabit the Ranchos, where they rear cattle. The principal American establishment to the W. of the band of pines above-mentioned, is the *Aix Bayou*, entirely inhabited by Americans, who have already erected 7 or 8 cotton mills, and the products are exported to Nachitoches free of duty, as the consumption comes entirely from that place. The second American establishment is on the Brassos á Dios river, 150 miles from Nacogdoches. As this stream frequently overflows its banks, its vicinity is somewhat unhealthy. These emigrants have built a town named San Felipe de Austin, from that of the founder, Austin, an American, who promised to the federal government to locate from 500 to 600 families on the banks of the Brassos river. At Nacogdoches another grant has been made to an American of the name of Edwards, who resided at Mexico. This grant borders on that of Austin, and contains more than 2,000 square miles. N. of this, another grant has been made to a Mr Thorn, son-in-law of Edwards; and on the other side a similar grant has been made to general Wesvil. The colony called Fredonia, in this province, was established in 1824 by Mr Austin, who has offered to every colonist a lot of 640 acres, or an English square mile, with a house. The constitution of this government is that of a federal republic, and has been literally copied from that of the United States, but the Catholic religion

was alone to be tolerated. But such an absurd intolerant clause as this in any of the new independent states of Mexico, cannot long be in force in the vicinity of such a free government as that of the United States, as such an act would exclude all but Roman Catholic emigrants,—whereas all are made equally welcome to the United States. In 1825, captain Sedgewick, of Russelville in Kentucky, obtained a grant from the Mexican government of from 6 to 8 millions of acres, in this province, alongst the borders of Louisiana. One principal condition was inserted in this grant, that a certain number of the colonists should be free from all taxes for five years. The capital of Texas under the old government was San Antonio de Bejar, on a small stream of the same name, and contained, according to Pike, about 2,000 souls; but the present capital, Saltitto, on the confines of Coahuila and New Leon, is said to contain 8,000 souls. Its site is bad, being surrounded with arid plains, where the traveller suffers much from want of water. The western part of Texas is inhabited entirely by Spaniards. The soil is excellent, and all the habitations are watered by artificial canals, which cause the waters of the Rio de Nueces and neighbouring springs to irrigate the gardens and fields.

THE

REPUBLIC OF GUATEMALA.

GUATEMALA, or the *Federal Republic of Central America*, as it is called in its constitutional acts, was formerly a division of the viceroyalty of Mexico. It raised the standard of independence on the 24th of June, 1823; and the union formed under this title embraces the five states of Costa-Rica, Guatemala, Honduras, Nicaragua, and San Salvador. In consequence, perhaps, of its being the youngest born of the transatlantic republics, it has not yet attracted the notice of writers. Isolated in the midst of the new world, and without commercial relations, in consequence of its harbours being closed, this beautiful country, as an elegant writer of Guatemala expresses himself, was, until it elevated itself to the rank of an independent state, a rose shut up in its bud. At present, not only by reason of its new political aspect, but also on account of its valuable and multifarious productions—to say nothing of its extent—it demands a distinct place in the geography of America, and forcibly invites the attention of the commercial world.

Name and History.] The kingdom of Guatemala "received its name from the word *Quauhtemali*, which, in the Mexican language, means a decayed log of wood, because the Mexican Indians who accompanied Alvarado, found, near the palace of the kings of Kachiquel, an old worm-eaten tree, and gave this name to the capital." Such is the statement adopted by Don Domingo Juarros, in his history of the kingdom of Guatemala, as the true origin of the name. Some writers, however, he tells us, have derived it from *Uhatezmalha*, which signifies, in the Tzendale dialect, a mountain that throws out water, "alluding, doubtless, to the mountain on the skirts of which the city of Guatemala was built." Another etymology is given by Francisco de Fuentes y Gusman, who derives the name from *Coctecmalan*, signifying 'milk-wood,'—a peculiar tree found only in the neighbourhood of the supposed site of the original capital, where now stands the village of Tzacualpa. Lastly, Juarros suggests, that the word may possibly be merely a corruption of the name of *Juitemal*, the first king of Guatemala, as Quiche was named from Nimaquiche, and Nicaragua from the cacique of the same name. The principal part of Guatemala was conquered in 1524 by Pedro de Alvarado, who found the country in the possession of above 30 different tribes, each governed by their own chief, and exhibiting distinct languages and manners. Most of these tribes were ultimately persuaded to embrace the profession of Christianity; but the Mosquitos and Poyaise, located in the eastern parts of the country adhered to the religion of their forefathers. The Mexican or Aztec language is spoken by the *Pipil Indians*, who are settled along the coasts

of the Pacific, and by some other tribes; besides this, no fewer than 24 dialects, peculiar to Guatemala, are still said to be spoken, the names of which are, the *Quiché*, the *Kachiquel*, the *Zutugil*, the *Mam*, the *Pocomam*, the *Pupuluca*, the *Sinca*, the *Chorti*, the *Alaguilac*, the *Caichi*, the *Pochonchi*, the *Ixil*, the *Zotzil*, the *Tzendal*, the *Chapaneca*, the *Zoque*, the *Coxoh*, the *Chanabal*, the *Chol*, the *Uzpanteca*, the *Lenca*, the *Aguacateca*, the *Quecchi*, and the *Nahuate* or *Pipil*. The *Maya* language is also spoken in Chiapa. "It is true," says Don Domingo Juarros, "there is a strong resemblance between some of the idioms; and the Indians of one tribe can understand those of another from analogy: these instances, however, are not very frequent, nor can the intercourse be maintained with sufficient clearness and precision to enable them to traffic with each other readily and satisfactorily." The learned Don labours with patriotic solicitude to show, that his country was never subject to the Mexican sovereigns. The proofs he adduces are, first, that the Mexicans always compelled the inhabitants of the countries they conquered to adopt their language, but the Aztec is not the prevailing language in Guatemala; secondly, that at the time of the conquest, the Spaniards found no open road from Mexica to Chiapa, but only narrow paths, in many places overgrown by vegetation. According to the tradition recited by the historian himself, the Tulteca or Toltec Indians, the most powerful and civilized of all the nations of Guatemala, came originally from the neighbourhood of Tula, in the kingdom of Mexico. This emigration took place by direction of an oracle, in consequence of the great increase of the population, in the reign of Nimaquiche, the fifth king of the Tultecas. "In performing this journey, they expended many years, suffered extraordinary hardships, and wandered over an immense tract of country, until they discovered a large lake, (the lake of Atitan,) and resolved to fix their habitations in a convenient place at a short distance from it, which they called Quiche, in commemoration of their king Nimaquiche (Quiche the Great,) who died during their peregrination." The time of this emigration, it is, of course, impossible to ascertain with precision. Nimaquiche was succeeded by his son Acxopil, from whom Kicab Tanub, the contemporary of Montezuma II., was the 14th in succession who reigned in Utatlan, the capital of Quiche. We believe that no Spanish colony was ever established with a less effusion of blood than that of Guatemala; and the praise of this is due to the celebrated Dominican, Las Casas, who accompanied the conquerors in their expedition against this country. In the 16th and 17th centuries, Guatemala was greatly harassed by English and Dutch privateers, and by the inroads of the Mosquitos and Poyaise. These fierce aboriginals maintained an unrelenting struggle with their Spanish neighbours, while they freely permitted the English to form settlements upon their coast. The celebrated Poyaise scheme of the pseudo-cacique MacGregor, and its melancholy results, are yet fresh in the recollection of our readers. On the fall of Iturbide, the Guatemalans declared themselves independent, and erected a federal republic, the constitution of which will be afterwards related. The discovery which was made in this country, in the neighbourhood of Palenque, about the middle of last century, of the ruins of a town nearly 18 miles in circumference, with various monuments and other antiquities, has led some antiquarians to conjecture that the ancient inhabitants of Guatemala must have held very direct relations with the known nations of antiquity, especially the Egyptians.—Under the Spanish government, Guatemala formed a captain-generalship independent

of the other governments and vice-royalties of Spanish America, and divided into the following 15 provinces:

Chimaltenango,	Escuintla,	Suchiltepec,
Chiquimula,	Leon,	Solola,
Ciudad-Real,	Quezaltenango,	Sonsonate,
Comayagua,	Sacatepec,	Totonicapan,
Costa-Rica,	San Salvador,	Vera-Paz.

Its ecclesiastical constitution comprehended one archbishop, and three bishops.

Boundaries and Extent.] This country is situated between the 8th and 18th parallels of northern latitude. Its shores are washed by the sea of the Antilles on the N.E., and the Great Southern or Pacific ocean on the S.W. On the N.W. it is bounded by the Mexican territories, and on the S.E. by those of Columbia. The frontier-line betwixt Guatemala and Columbia runs from S.S.W. to N.N.E. Commencing at Point Burica, on the Southern ocean, it cuts the central Cordillera in Mount Varu, and runs on to Cape Careta on the sea of the Antilles, or Caribbean sea. The frontier towards Mexico commences between Tonala and Estepec on the Southern ocean, and runs from S. to N. until it reaches Chiapa; it then turns to the E., and after many sinuosities of course, it joins the Caribbean sea on the embochure of the Sibon. Its course is determined throughout a considerable part of its extent by the courses of the rivers Zodales and Samasinta. Its greatest extent is measured by a line running from N.W. to S.E., being about 1,118 miles; its greatest breadth is betwixt Cape Gracias-a-Dios and Cape Desolada, being 403 miles; its narrowest admeasurement is towards its S.E. extremity, where it does not exceed 93 miles across. The superficial extent of Guatemala is, according to Humboldt, 26,152 leagues of 25 to a degree, or 200,499 British square miles. Hence this republic is larger than Spain in Europe, or Chili in the new world.

Coasts.] The most northern portion of the S.W. coast forms with that of Mexico the gulf of *Tehuantepec;* passing to the S. we find the port of *Guatemala*, the cape *De los Remedios* and the gulf of *Fonseca*, which embraces a number of little islands. The gulfs of *Papagayo*, and *Nicoya* or *Salinas*, bounds the peninsula which terminates to the S.E. in *Cape Blanco;* and the gulf of *Dolce* opens towards the Columbian coast. On the Caribbean coast we find the gulf of *Honduras*, which forms a minor gulf, extending N.E. to the cape of *the Three points.* Going eastward the bay of *Truxille* presents itself, and farther on that of *Cartago.* We then meet with *Cape Gracios-a-Dios*, *Sable bay*, the lagune *De Perlas*, the bay of *Blewfields*, and the gulf of *Matina*, all belonging to the great *Mosquito bay.* An infinite number of little islands are sprinkled along the coast: among the most considerable of these are *Terranova*, *Poatan*, and *Guanaja*, at the entrance of the gulf of Honduras.

Mountains and Volcanoes.] A chain of mountains, a prolongation of the cordillera of the Andes, enters by the S.E. frontier, and traverses the whole of this region, contracting and expanding its branches with the breadth of the country. In Veragua, the most S.E. province of Guatemala, the chain called *Sierra de Canatagua* runs in a line directly contrary to that of the Andes, and may be regarded as a great natural boundary between North and South America. The chain of Guatemala, jagged with volcanic cones, of which above 35 have been enumerated, runs along the western coast from the lake of Nicaragua towards the bay

of Tehuantepec. In the province of Sonsonate, this chain is denominated *Sierra de Apaneca.* The most southern volcano is that of *Barua* or *Varu.* There are 3 volcanoes in a state of activity on the southern shore of the lake of Nicaragua; and to the N. of that lake several others exist, of which the most active is that of *Malaya.* The *Isalco* rises near St Salvador, and is distinguished by its successive eruptions in 1798, 1805, and 1807. In the environs of Guatemala we remark the volcanoes of *Aqua* and *Fuego*, the former occupying the summit of one of the loftiest mountains of central America, its height, according to Mr Hall, being 14,760 feet. The volcano of *Soconusco* in 15° 59′ N. lat. terminates the Guatemala series of volcanoes.[2]

[2] We must regard the central chain of Guatemala as forming the division betwixt the great basins of the Caribbean sea and the Pacific; and it has frequently been proposed to open a communication betwixt the Atlantic and Pacific ocean by cutting across this barrier. Were such a work executed on an adequate scale, the benefit to the whole commercial world would be immense; not only would the coast-navigation of the American continent be prodigiously facilitated, but a new line of transit attended with so many advantages, as would give it a decided superiority over the present line, would be opened betwixt Europe and India. If the China and fur-trade were directed through this channel, there would be at least six weeks sailing saved on the passage, that is, about 3000 miles in southing, and nearly as much on the east and west-tacking: there being in such a case no need to stand into southern latitude at all, and the passage being nearly or comparatively parallel. We are told, indeed, by some writers, that the shores of Columbia and Chili are exceedingly dangerous to navigators, on account of the *papagayos*, or violent winds which prevail during great part of the year, and that the eastern coast in particular is totally destitute of good harbours or anchorage; but with regard to the dangers of navigation in this quarter, we believe that, in the experience of navigators, they are not nearly so formidable as have been represented. There is always good sea-room; violent periodical winds are never felt before the middle of July, nor after the close of September; the weather is remarkably steady in the Caribbean sea; and there are in fact more places of shelter on the east coast than on the west. Vessels lying in Chagres are completely sheltered from the N.E. or prevailing wind; and on the approach of a hurricane can run up the river so as to be quite secure. Porto Bello has a rather difficult entrance, but affords good protection to vessels. There is always sea-room in the gulf of Mexico; and there are a number of excellent harbours on the Florida coast. As to the best point of junction betwixt the two oceans, considerable diversity of opinion exists. M. Humboldt has enumerated no fewer than nine different places at which the attempt might be made with every prospect of success; and five of these have been considered practicable by Mr Pitman in his 'Succinct View,' published in 1825. One of these, by the great lake of Nicaragua, nearly under the parallel of 12° 13′, has attracted the peculiar notice of the North Americans; and we believe a joint-stock company was formed in New York about five years ago, for the purpose of executing a grand junction-canal in this quarter, with the consent of the Guatemala government; but the scheme has since been given up, on account of the immense expense with which it was evident it must have been attended. There is reason, however, to believe that the government of the United States has its eye still directed towards this quarter; and a canal here would certainly be attended with peculiar advantage to the North Americans. To understand the line proposed here, let it be observed that the great lake Nicaragua joins on the one side with the lake of Leon, stretching to near the shores of the Pacific, and communicates on the other, by the river San Juan, with the Caribbean sea. But the latter river is unfortunately not navigable to any distance from its mouth—if the report of disinterested travellers may be credited—neither is the small river Tosta, which flows on the other side of the continent, near the lake of Leon, into the Pacific; so that to complete the navigation betwixt the two seas, a very considerable distance would require to be cut; besides, the navigation of the lake Nicaragua is highly intricate and dangerous. M. Humboldt suggests that the lake Leon might be avoided altogether by drawing a canal from the larger lake to the gulf of Papagayo. And it is somewhat curious that the old maps indicate a communication between the Nicaragua and the Pacific to have once existed hereabouts. If we are rightly informed, however, the high volcanic ridge, which here runs between the interior lake and the ocean, would render any attempt to carry a canal across the isthmus in this quarter exceedingly difficult.

The projectors of a grand canal for ships of all dimensions, by the river St Juan, and the lake of Nicaragua, are probably not aware of the difficulties to be encountered in making and maintaining such a line of communication, which may be judged of from the following particulars, and the result of the military operations which were formerly carried on in that quarter. In 1779, Spain having joined France in abetting the revolt of the British colonies in North America, measures of retaliation were adopted

Rivers.] From the summits of the mountains which cross the territory of Guatemala, numerous rivers descend towards the northern and

against the colonies of that nation. The governor of Jamaica, the late Major-general Sir John Dalling, and Vice Admiral Sir Peter Parker, commanding the naval forces on that station, on receiving authority from government to act offensively in consequence of the rupture with Spain, sent an expedition against Fort Omao, in the bay of Honduras. Encouraged by the brilliant success which had attended that enterprise, and by information which appeared to be satisfactory, general Dalling was induced to recommend a more extensive plan, which was approved of by government. Its object was to ascend by the river St Juan to the lake of Nicaragua,—to take post in one of the islands, and encourage the inhabitants in the cities of Granada and Leon, near its western extremity, to declare their independence,—or, if necessary, to take possession of those places, with a view to further operations on the west coast of America, assisted by a squadron from England, to co-operate with the army on that side of the continent. The first destination of the armament, was to the bay of Honduras, where possession was taken of the healthy unoccupied island of Rattan: a party of Indians was collected with their craft on the Mosquito shore, and a corps was formed of the British settlers there, and in the bay, whose negroes were to act as pioneers with the army. Captain, afterwards admiral, Nelson, of the Hinchinbrook, having been sent with a reinforcement of infantry from Jamaica, the armament proceeded to the river St Juan, where it arrived on the 24th of March. The river was, in general, rapid, and in many places so shallow, it being the dry season, that it became often necessary to lighten the boats, and drag them up by hand. On the 9th April, on approaching the fortified island of St Bartolemeo, Nelson asked leave to "board the battery" with a small party, and carried it sword in hand. In two days more, they came in sight of the castle of St Juan, which is 69 miles from the harbour, and 32 from the lake. The garrison of Fort St Juan, being cut off from the river, in want of water and provisions, and apprehending an assault, surrendered on the 29th April. Brigadier-general Kemble, with part of the reinforcements, soon after reached the castle, with a view of proceeding to the lake; but disease counteracted every effort, until in a few weeks its ravages had not left men in health to attend the sick, or even to bury the dead. Had the mortality been less dreadful, it would have been impossible for several months to ascend the upper part of the river, as the rains had commenced, and it had become very full and rapid. A small garrison was therefore left in the fort, and the remainder of the troops, with the prisoners of war, embarked in the boats, and in two days reached the harbour. The troops left there, and the crews of the ships of war had suffered equally from disease. Many valuable officers, of both navy and army, died or lost their health on that unfortunate service; and out of above 2,000 men, including the forces of every description, not 300 recovered. The negroes were the only class of people whose constitutions resisted the effects of the climate. Upon the return of the remains of the expedition to Jamaica, and afterwards, Lieutenant-general Dirom—to whose 'Remarks on Free Trade' we are indebted for this abstract of the operations of the British armament in Central America—had many opportunities of acquiring information regarding those and other parts of the country, and from all he knows, it is greatly to be apprehended, that the noxious atmosphere at the mouth, and in the confined course of the river St Juan, which is only about 300 yards in breadth, as well as its shallowness in the dry season, and at all times the rapidity of its current, are circumstances which, upon farther investigation, may unfortunately be found to render it ineligible to become a navigable line of communication for ships of all dimensions, as intended, across that part of the continent. "An object of so much importance to the commercial world, and so well calculated to commemorate the independence of the United South American states," continues general Dirom, "ought not, however, to be relinquished, as climate may be improved by clearing the banks of a river of wood, and draining marshes,—hills be perforated by tunnels,—and lesser undulations on the surface obviated by locks. In case, however, no favourable tract, with an adequate supply of water, should be found for the execution of so grand a design, still considerable facility might be given to commercial intercourse, and the capital requisite for its accomplishment, be employed with a better prospect of merited advantage to subscribers, and, perhaps, with no less benefit to the public, by making three great lines of road for carriages, instead of the present narrow and often steep paths, by which merchandise is conveyed on mules across Central America. These roads, should the nature of the country admit, ought to be at least 60 feet wide, having a rail-way on one side for waggons, and on the other a foot-path; and on both sides rows of umbrageous trees, wherever they could be planted with a prospect of success. One of them might cross the isthmus of Darien, perhaps between Chagré and Panama,—a second from the gulf of Dulce to Guatemala,—and a third from the gulf of Mexico, to that of Tehuantepec; none of them more than from 60 to 100 miles in length, while the projected canal by the river St Juan, and the lake of Nicaragua, would exceed 200 miles between the Atlantic and the Pacific oceans."

The isthmus of Tehuantepec, under the higher parallel of 16°, might, it has been supposed, afford an easy communication; for a canal of 20 miles length, cut through the

southern shores. Some of these rivers are partly navigable, such as the *Motagua* and the *Ulna*, and many others might easily be made so, were

forest of Tavisa, would connect the head of the Malpaso, which flows into the gulf of Mexico, with that of the Rio de Chimalapa, which discharges itself into the Pacific ocean. These rivers, however, do not appear to be navigable to any distance from their mouth by vessels drawing above four or five feet water; and the navigation of the Casso, or Malpasso, is much impeded by its rapids. M. Humboldt considers the small bay of Cupico, situated between Cape St Miguel and Cape Corientes, at the entrance of the bay of Panama, as likely to afford a most commodious spot for the junction of the two oceans. Between Cupica and the point where the river Naipi becomes navigable, is a distance of only 15 or 20 miles, through a flat level country; and the Naipi terminates in the Atrato, or Darien's river, which discharges its waters into the gulf of Darien, near the spot where the colony of New Caledonia was founded in the latter part of the 17th century. The bay of Cupica is certainly a desirable entrance or outlet to such a canal, as it is sheltered from the northerly winds, and affords good anchorage; but we have been informed, by a very intelligent nautical gentleman, that the Atrato would require to be cut throughout a great part of its length before it could be rendered a practicable line of passage for any thing except light boats or canoes. It appears, however, from a report given in by Mr Loyd, who was appointed by the late lamented Bolivar to survey it, between Panama on the Pacific, and the mouth of the Chagres on the Atlantic, and which was commenced in 1826, and completed in 1829, that the chain of the Andes is terminated in the narrowest part of this isthmus,—there being a complete and uninterrupted break of the mountain-range in the line between these two points, a circumstance which marks this spot as peculiarly fitted for cross communication. The highest point of elevation here, between the two seas, is only 6,332 feet above the level of the sea at Panama at high water, and the mean level of the Pacific 3,052 above the Atlantic at the mouth of the Chagre. Mr Loyd has laid down, in his map of the survey, two lines for a rail-road across the isthmus, both commencing at a point near the junction of the Trinidad river with the Chagre, and running across the intervening plain in opposite directions, the one to Cherrera on the Atlantic side, and the other to Panama on the Pacific; so that by means of these two lines of rail-road a communication may be effected with perfect ease across the isthmus. The road to Panama would have the advantage of terminating in a considerable city. The banks of the Trinidad, towards the Atlantic side, are well suited for wharfs, especially where he fixes the commencement of the rail-roads. As the mouth of the Chagre is impeded by a sand bar, Mr Loyd recommends forming a communication with the neighbouring bar of Limon, which, in its present state, has excellent anchorage; and which, by making certain improvements in it, might, at a small expense, be rendered one of the most commodious and safe harbours in the world. For 12 miles up the Chagre there is no perceptible current to the sea. This survey has completely demolished the idea of a continuity of mountain-range from the straits of Magellan on the Pacific, all the way across South and North America to the westward of the mouth of the Unjigah, where the rocky mountains terminate on the shore of the Icy sea. On the eastern side of the province of Veragua are merely numerous detached mountains of considerable height, with steep and rugged sides. To the E. of this province succeed numerous conical hills, seldom above 500 feet of elevation, rising from plains and savannahs. Between Chagres on the Atlantic, and Cherrera on the Pacific, these conical hills are less numerous, and are separated by extensive plains, with only a few occasional insulated hills of inferior height and extent. What geographer, after this, will, from a love of system, still cling to the idea, so often but so unsuccessfully refuted, of a continuity of mountain-range, and denominate it the North American Andes? For, if so, all communication across the isthmus, whether by rail-roads or canals, would be impracticable.

The isthmus of Panama also may be found adapted for a great junction-canal. The direct distance between Panama and Porto Bello is only 55 miles; but the Rio Grande, which falls into the sea at Panama, is securely navigable, by vessels of 200 tons, to within 15 or 18 miles direct distance of the Chagres, which flows northward, and falls into the Atlantic at Porto Bello; and making allowance for the necessary windings, the whole distance requiring to be cut could not probably exceed 30 miles. When Humboldt wrote, the height of this tract was unknown; but it has since been explored, and found to present no formidable obstacle to the cutting of a canal between the two rivers. It does not even appear that tunnelling would be necessary. As, however, the level of the Atlantic is about 16 feet higher than that of the Pacific, a few locks would be required on this line of inland navigation. We know that careful surveys of the isthmus of Panama and the rivers have been recently executed, and that the gentlemen employed on this occasion have reported very favourably of the proposed undertaking. One of them informed us that he had discovered some traces of an artificial ditch or canal, which seems to have been executed at some very distant period with the view of effecting a junction betwixt the two rivers flowing to opposite sides of the continent. It appears to have been carried in a winding course round the bases of several insulated hills which rise in this quarter; but the

the scheme encouraged by the government, or were it an object of private speculation; and no doubt we shall behold the government seriously occupying itself with this important improvement, as the prospects and resources of the nation unfold themselves. The *San Juan* discharges the waters of Lake Nicaragua into the Caribbean sea, which also receives the *Blewfield*, called in the upper part of its course the *Nueva Segovia*, and the *Rio Grande de Perlas*, the *Tonglas*, the *Yare* or *Herbias*, the *Poyais*, the *Roman*, the *Ulna*, the *Molagua*, and the *Rio Dolce* or *Rio Golfo*. Amongst the streams which flow to the Pacific, are the *Higueron*, the *Realejo*, the *Fonseca*, and the *San Miguel*. In general, Guatemala may be considered as one of the best watered countries between the tropics.

LAKES.] The Lake of *Nicaragua* is 186 miles in length from N.W. to S.E.; 77 miles in breadth from N.E. to S.W.; and 465 miles in circuit. Its greatest depth is 40 fathoms; its least 30 feet. Its waters are not brackish; and its surface is adorned with a numher of picturesque islands, of which the only inhabited one is Omelepec. The height of the lake above the level of the Pacific is 134 feet. It receives the waters of lake Leon, on the N.W., by the river Lipitapa, *Lake Leon*, or *Managua*, is 48 miles long by 23 broad; it is said to be deep enough to receive the largest vessels. The lake of *Atitan* is 8 leagues in length, from E. to W., and more than 4 from N. S. It is entirely surrounded by mountains and rocks of irregular form. From its margin there is no gradation of depth, but the banks are precipitous, and the bottom has not been found with a line of 300 fathoms. Several rivers discharge themselves into it, and it receives all the waters that descend from the mountains; but there is no perceptible channel by which this great influx is carried off. The water is fresh, and so cold, that in a few minutes it benumbs and swells the limbs of those who attempt to swim in it. The only fish caught in it are crabs, and a species of small fish about the size of the little finger (*pepescas?*). These are in such countless myriads, that the inhabitants of all the ten surrounding villages carry on a considerable fishery for them. The communication between one village and another is carried on by canoes.

Climate.] The eastern coasts of this country are the most healthy; on the shores of the Pacific the heat is often extreme, and Europeans are frequently attacked with intermittent fevers. In the interior the climate is greatly modified by the height of the country.

Soil and Productions.] On the coasts we frequently meet with a considerable extent of marshy ground; in the interior a volcanic soil abounds, which, like all soils of this description, is remarkably fertile. The productions of the soil are as varied as those of Mexico, of which we have already given a detailed account; and the succession of the fruits and produce of all kinds is uninterrupted throughout the year. In the province of Soconusco, the cocoa for the especial use of the court of Madrid, was formerly gathered; but the two productions of this region best known to com-

points of junction are not discoverable. Whilst we are upon this subject we may remark, that, in fact, the merit of having first effected a communication between the two great oceans already belongs to a very humble individual, a parish priest, who, in the year 1788, caused his Indian flock to cut a shallow canal between a branch of the San Juan and a branch of the Quito, by which the small canoes of the country have actually passed, and do still pass, in the rainy season, from one sea to the other,—a distance of 250 miles. This cut has been much neglected; but is still navigable by light craft, drawing from one to two feet water; and we should think a canal might be executed along the line thus pointed out with little difficulty.

merce are indigo and cochineal; the produce of the latter in 1825 was valued at 400,000 piastres. "The cultivation of indigo," Humboldt says, "which is very general in Guatemala and Carraccas, is neglected in Mexico; and indigo is annually imported from Guatemala, where the total produce of the plantations amounts to the value of 12,000,000 of livres. Raynal is wrong when he maintains that the Europeans introduced the cultivation of this valuable plant into America. Several species of *indigofera* are peculiar to the New Continent. Ferdinand Columbus, in the life of his father, mentions indigo among the productions of Hayti. Hernandez describes the process by which the natives separated the fecula from the juice of the plant; a process different from that now employed. The small cakes of indigo dried by the fire, were called *mohuilli* or *tleuohuilli*: the plant was designated by the name *xiuhquilipitzahuac*." In Guatemala, the plant is called *giquilite*, and the indigo prepared from it, *anil*; the former is the native name, the latter has passed into the Spanish language from the Arabic word *niz* or *nil*. Hernandez calls the Mexican indigo, *aniz*.

Animals.] The country is not less rich in animal than in vegetable productions. Besides all the animals common to the American continent, is the *zorillo*, and *quetzal*; the one a small species of fox, the other a large bird of a beautiful green plumage; it appears to possess at least two animals peculiar to itself. The tail feathers of the quetzal, which are very long, are favourite ornaments with the natives. The *raxon* is a very beautiful party-coloured bird. The rivers and lakes swarm with fish, and the coasts afford a variety of objects of pursuit to the fishermen. Green turtle abounds along the Mosquito shore; and *manatees* are very plentiful. This singular creature may be considered the connecting link between quadrupeds and fishes; it retains the fore-feet, or rather, hands of the former, with the tail of the latter, spreading out in a horizontal direction like a large fan. Beneath the skin—which is uncommonly hard and thick—there is a deep layer of very sweet fat. The meat, in its thickest parts, has the singular property of being streaked throughout with alternate layers of fat and lean, being most excellent food. The manatee is extremely acute in its sense of hearing, and immerges itself in the water on the slightest noise; it feeds on long shoots of tender grass growing on the banks of the rivers, and will rise nearly two-thirds of its length out of the water to reach its food; it is found only in the most solitary and least-frequented creeks and rivers; the male and female are generally together; their common length is from 8 to 12 feet, and they weigh from 500 to 800 pounds; some of them are however much larger, weighing from 12 even to 15 cwt. The Indians generally steal upon them early in the morning when they are feeding, and kill them with a harpoon; but if the least noise is made in approaching, they immediately sink, and escape. Among the noxious animals and reptiles, not the least formidable are the warrior ants (*hormigas guerreras*), who are double the size of the common ant and always move in regular array, like an army. "Wherever they enter a house, they spread all over it, and clear it so effectually as not to leave a single worm, reptile, or vermin of any sort behind them when they depart. To the larger creatures, such as snakes, scorpions, toads, rats, &c. they are formidable from their numbers: in attacking these animals, they adhere so closely to their bodies that they soon kill them, and devour them to the bones. When they have cleansed one house, they quit it, and proceed to another." Juarros adds to this account a very marvellous pro-

perty to these beneficent marauders. "If any injury be done to them when in the house, they revenge it by biting or stinging the assailant, and immediately retreat, leaving the vermin untouched!"

Population.] According to Baron Humboldt, the population of Guatemala, in 1822 did not exceed 1,600,000 souls, viz.: 280,000 Whites, 880,000 Indians, 420,000 of a mixed race of Blacks, Whites, and Indians, and 20,000 Blacks. Their calculations, however, by the acknowledgment of Humboldt himself, in a letter to Bolivar, are only vague conjectures, which require to be rectified by accurate statistical data. Senor del Valle was of opinion that the population of Guatemala could not be less, in 1824, than 2,000,000. He remarks that no pestilential diseases have occurred in that country for many years—that it has not been exposed to devastating war, like Buenos Ayres, Chili, Peru, Colombia, New Spain—that articles of provision are to be met with here at lower prices than in Mexico—and that marriages are more prolific. In the opinion, therefore, of Senor del Valle, which appears by no means ill-founded, the population of Guatemala may be estimated to exceed that of Venezuela, Peru, Chili, and perhaps of Buenos Ayres.

Government.] Guatemala had scarcely raised the standard of independence when measures were taken to nominate a constituent assembly, by which the basis of a constitution, fit for a federal republic might be arranged, and through the medium of which it might be presented for approval to the five states composing the nation. After some months the labours of the assembly were completed. The model which served to guide the legislators of Guatemala, was the republican form of the United States of America, together with that of Colombia. All the nascent republics of America felt the necessity of constituting the New World on one and the same principle. The congress is elected by the people, and is half-renewed every year. Each state sends a representative for every 15,000 inhabitants. The senate is composed of members popularly elected, in the ratio of two for each state. That body has the right of sanctioning all the resolutions made in congress; and a third part is renewed annually, the individuals going out being eligible to be re-elected. The executive power is exercised by a president, nominated by the inhabitants of the different states of the federation. The offices of president and vice-president, both nominated in the same way, last for four years; and the individuals who fill them may, without any interval, be once re-elected. The constitution abolishes slavery, establishes individual liberty, and guarantees the freedom of the press. The republic is at present divided into five states; each of these states is free and independent as to its provincial government, and internal administration. On the 20th of February, 1825, the constituent assembly was dissolved, and the federal congress succeeded it, which swore to maintain the constitution. The regular troops of the republic amount to 1500 men; the militia are stated at 80,000.

1st. The State of Guatemala.] This is the largest state of the Guatemalan confederacy. It occupies the N.W part of the republic, and is bounded on the N.W. and N. by Mexico; on the E. by the gulf of Honduras, the state of Honduras, and that of San Salvador; and on the S. and W. by the Pacific ocean. Its length from N.W. to S.E. is about 390 miles, and its average breadth 170 miles. It is divided into 7 *partidos* or departments, and 108 parishes, and sends 36 members to congress. Its population in 1825 was 512,120 souls.—*Guatemala-la-Vieja*, or *Santiago de los Caballeros de Guatemala*, is situated in the department of Sacatepec,

about 20 miles to the N. of Guatemala-la-Nueva. The first town of this name, the residence of the ancient *Rachiquelcs*, or kings, has entirely disappeared; the present town was founded by the Spaniards in 1524. Within 20 years, however, of its foundation, it was entirely destroyed by the eruptions of two volcanoes in the neighbourhood; and, although rebuilt afterwards, a violent earthquake, which took place in 1775, induced the greater part of the inhabitants to remove to Guatemala-la-Nueva. In its most flourishing state it contained 38 churches, and 34,000 inhabitants. Of the former, only the cathedral, a fine building 300 feet in length, now exists, and the latter are reduced to about 8,000 souls, chiefly converted Indians.—*Guatemala-la-Nueva*, the capital of the republic, is situated in 14° 40′ N. lat. on the banks of the Rio de las Vacas, in a very large and fertile valley; but as its supposed elevation is about 5,000 feet above the level of the Pacific, it enjoys a temperate and delightful climate. The streets are straight and well-paved; and the houses, although necessarily built low from the dread of earthquakes, are handsome, and furnished with beautiful gardens. The cathedral is a fine specimen of modern Italian architecture; there are about 40 other religious edifices, and a university which was founded in 1676. The population in 1825 amounted to 30,775 souls. Guatemala is 210 miles distant from Isabal on the gulf of Dolce, and 150 miles from Isabal à Omoa, the principal sea-port of the republic. The intermediate country betwixt both these places consists of naked mountains and fertile valleys. The distance from the city of Mexico is about 680 miles.—*Jalapa* had a population, in 1825, of 3,512 souls; *Santa Cruz*, 2,227; *Ostuncalco*, 4,454; *San Cristoval Totonicapan*, 4,864; *San Juan Zacatepequez*, 8,589; *Patsum*, 7,888; *Patzicia*, 6,258; and *Chichicastenango*, 4,564.

The Volcan de Agua.] Among the natural curiosities of the valley of Guatemala, is the gigantic Volcan de Agua. "This mountain," says Juarros, "is of a conical figure; its base extends over nearly all the western part of the valley of Guatemala. On the side towards the city, the ascent by the road from the base to the summit, is 3½ leagues; and from the side towards Alotenango, it is more than 4 leagues. The circumference at the bottom is 18 leagues. Cultivation is confined to the lower parts of the mountain; the middle region is covered with thick forests; and during great part of the summer, the city is supplied with snow from the upper region. On its skirts are numerous mineral and medicinal springs, and many Indian villages, besides a great number of detached houses and farms. On the summit is a concave space, resembling a crater, measuring about 140 yards by 120. From the edge of this crater, a most beautiful prospect presents itself in every direction,—Old Guatemala with its fertile fields and numerous farms, the village and lake of Amatitan, with all the surrounding country, can be distinctly seen. Looking westward, the provinces of Suchiltepec and Soconusco, and even the plains of Chiapa, may be discovered; to the eastward, the provinces of Zonzonate, Santana Grande, and San Salvador, with the lake of Gilopango, may be distinguished; on the north and south, the view is bounded by the two oceans."

2*d*.. *State of Honduras.*] This state is bounded on the E. by a right line drawn from the summit of the great central chain, in 13° 15′ N. lat. to Cape Camaron, which separates it from the Mosquito territory; on the S.E. by the state of Nicaragua; on the S. by the gulf of Fonseca; on the S.W. by the course of the great central chain which di-

vides it from the state of San Salvador; and on the W. by the lake of Dolce, the Rio Golfo, and the Amatique bay, which separates it from the state of Guatemala; and on the N. by the bay of Honduras. Its length from N.E. to S.W. is about 340 miles, and its greatest breadth 300. The central chain divides it into two great physical divisions,—the one lying towards the bay of Honduras, the other towards the Pacific. The climate is warm, moist, and unhealthy, especially along the eastern shore. The surface of the country is undulated and diversified, presenting beautiful plains, swelling hills, and valleys covered with umbrageous forests. The soil is fertile, and this state is the richest in mines of gold and silver in the whole confederation. It is divided into 12 departments, and sends 11 members to congress. Its principal ports on the northern coast are: *Omoa*, *Caballos*, *Sal*, *Triumfo de la Cruz*, and *Truxillo*.

Island of Roatan.] Eighteen leagues N.E. of Port Truxillo, the island of Roatan lies off the coast, extending from 45 to 50 miles in length, by from 6 to 10 in breadth. The approach to it is dangerous, owing to the reefs and rocks by which it is surrounded; but the principal harbour affords good anchorage, though rather open to S.W. winds. In the year 1642, this island was taken by the English, but was abandoned eight years after. From that time to 1742, it remained uninhabited; the English then again occupied and fortified it, but were dislodged about 1780. They resumed possession of it in 1796; but in the following year the Spaniards once more recovered it.

3d. State of Nicaragua.] This state is situated in the S.E. quarter of the republic. It is divided on the N.W. from Honduras, by the central chain of Guatemala, and from the Mosquito territory by the Rio de Nueva Segovia; on the E. it is washed by the Caribbean sea; on the S. by the state of Costa-Rica, from which it is divided by the Colorado on the E., and the Porto-Culebra on the W.; and on the S.W. and W. by the Pacific. It is about 430 miles from W.N.W. to E.S.E., and 248 in greatest breadth from N.E. to S.W. Nearly one-tenth of its surface is occupied by the lakes Nicaragua and Leon. The climate is very unhealthy at Realejo and along the San Juan river; but Nueva-Segovia, Matagalpa, and Masaya, enjoy a much finer temperature on account of their elevation. This state is divided into 8 departments, and sends 13 members to congress. Its population in 1824 was 174,400 souls. Its principal ports on the Pacific are: *Realejo*, *Desolada*, *S. Juan del Sur*, and *Brito*. The only port on the Caribbean sea is *S. Juan de Nicaragua*.

4th. State of Costa-Rica.] This is the most eastern, and, at the same time, the most southern portion of the republic. It is bounded on the N.W. and N. by the province and lake of Nicaragua; on the E. by the Caribbean sea and republic of Colombia, from which it is in part separated by the Chiriqui river; and on the S. and S.W. by the Pacific. Its length from E. to W. is about 190 miles, and its mean breadth from N. to S. 93 miles. The volcanic range, which traverses this country, determines its two general inclinations,—the one being to the N.E., the other to the S.W. This is the least commercial and the poorest state of the confederacy. Its population amounts to about 60,000 souls, and it sends 4 members to congress. Its chief town is *Cartago*, situated on the river of that name, and distant about 65 miles from the Pacific, and 95 from the Caribbean sea.

5th. State of San Salvador.] This state extends 160 miles along the shores of the Pacific; its breadth is about 100. The Indians of this ter-

ritory are the most civilized, and all speak Spanish. The city of *San Salvador*, which gives its name to the state, stands in a delightful valley, surrounded by mountains covered with wood, which terminate towards the N.E. in a volcanic summit, that has caused at different periods great devastation by its eruptions: it is in 13° 36′ N. lat., 89° 46′ W. long. The town was founded in 1528, with the view to keep the province of *Cuscatlan*, 'land of riches,' as it was then called, in subjection. It was created a city by Charles V. in 1545. The streets are laid out in right lines, the houses are commodious, and the markets are well supplied. The inhabitants, in 1778, were nearly 12,000, of whom 600 were Spaniards. The population has doubtless considerably increased since that time. The distance from Guatemala is 60 leagues E.S.E. The whole of this fine country invites the especial attention of the geologist and naturalist.

THE MOSQUITO TERRITORY.] That portion of Guatemala, commonly called the Mosquito territory, or *Mosquito shore*, and sometimes *Moscos*, is situated between the 11th and 16th northern parallels, and may be regarded as forming the eastern part of the states of Honduras and Nicaragua. In magnitude, this country exceeds Portugal. It is well watered, and fertile; but the coasts are marshy and unhealthy, as the fate of the Poyais settlers testified. The Mosquito Indians are divided into various tribes, of which the chief are the *Mosquitos Proper*, the *Poyaise*, the *Taoukas*, and the *Sambos*. Situated between morasses and inaccessible mountains, and a coast full of rocks and shoals, no attempts against them by the Spaniards, whom they mortally hate, could ever succeed. When the duke of Albemarle was governor of Jamaica, they spontaneously put themselves under the protection of the crown of Great Britain; and the king of the Mosquitos received a commission from his grace, under the seal of that island; after which transaction they continued steady in their alliance with the English, and very useful to them on many occasions. But the connexion between the English and Mosquitos no longer subsists. By a convention with Spain, in July, 1786, the English, in consideration of certain cessions on the coast of Jucatan, agreed to evacuate this country. Although governed by their own caciques, they must virtually be considered as subjects of the Guatemalan republic.—The town and territory of *Poyais*, where, a few years ago, some adventurers from this country attempted to establish an independent colony, are situated on the *Tinto* or *Black river*, which discharges itself into the Atlantic near Cape Camaron. This district, though nominally a part of Guatemala, has never actually been appropriated. The town or log-village of Poyais is situated on the W. side of the river, about 60 miles inland.

END OF VOLUME FIFTH.

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